

RAILWAY AGE

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY

FEBRUARY 18, 1952

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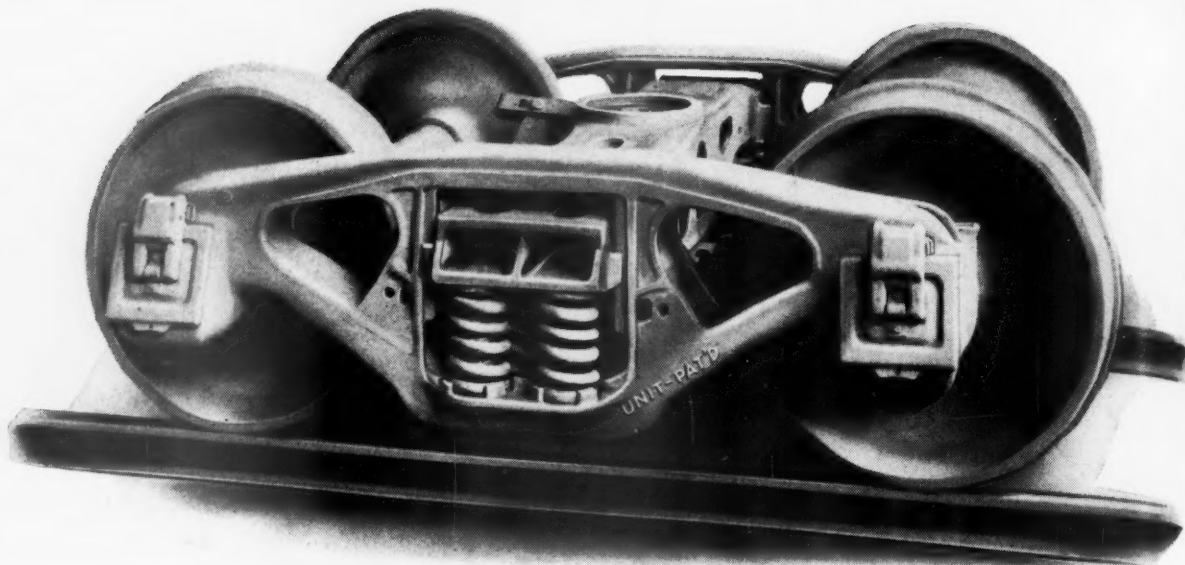
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IN THIS ISSUE

EDITORIAL COMMENT:

Do or Don't the Railroads Need More Freight Cars?	35
Profits Are Over-Stated	36

GENERAL ARTICLES:

Speed Control Installed on the Long Island	37
How Users View Refrigerator Car Trends	41
"How's Our New Line Coming Along?"	44
Reductions in Appropriations Bringing About "Deregulation," I.C.C. Says	48
How a Diesel-Electric Pays the Atlantic & Western	51

NEWS FEATURES:

Railroads' "Financial Weakness" Creates "Military Weakness" in Nation, White Warns	11
1951's Net Income Was \$693 Million	12
Fiscal 1951 Reviewed by Bureau of Safety	13
Threat of Socialism Makes U. S. Chamber Give High Priority to Transport Problems	14
Emergency Board Recommends Union Shop and Check-Off for "Non-Ops"	55

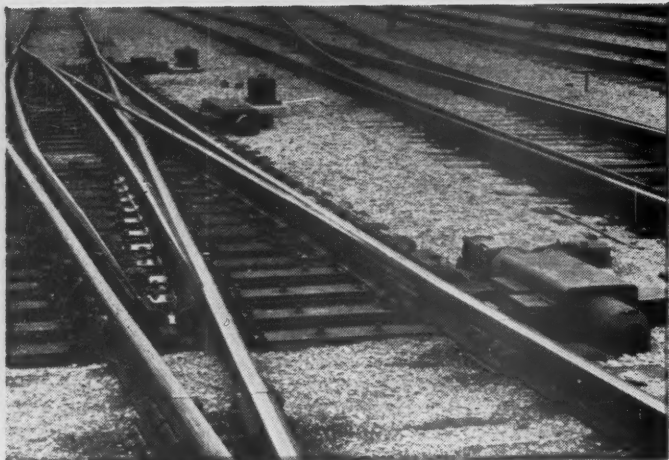
DEPARTMENTS:

News of the Railroad World	11
Letter from a Reader	43
New and Improved Products of the Manufacturers	52
Freight Operating Statistics	68
Current Publications	70

Published by SIMMONS-BOARDMAN PUBLISHING CORPORATION, New York 7

Railway Age Railway Mechanical & Electrical Engineer Railway Engineering & Maintenance
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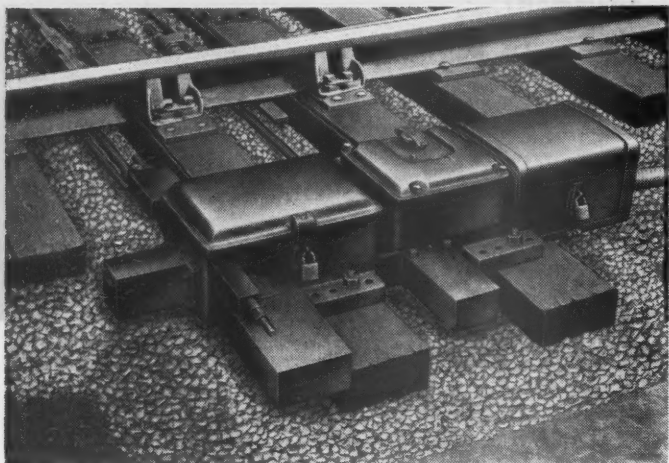
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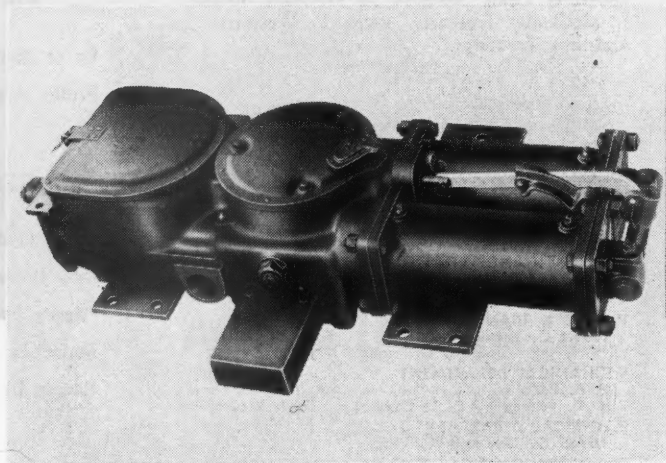
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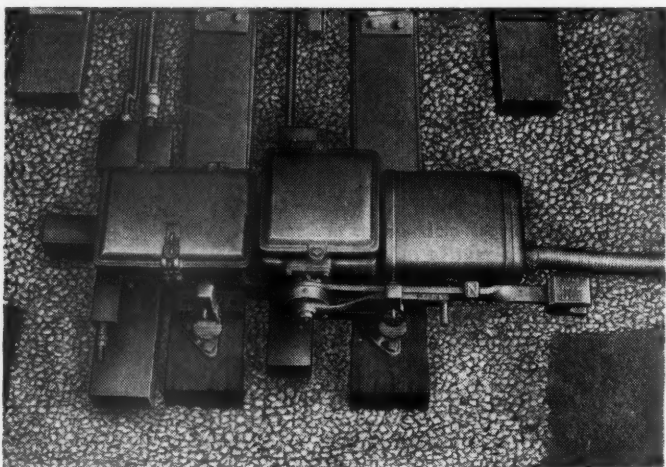
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WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, twelve months	
1951	\$10,390,672,580
1950	9,473,093,128
Operating expenses, twelve months	
1951	\$8,041,223,177
1950	7,059,242,353
Taxes, twelve months	
1951	\$1,203,238,466
1950	1,194,615,254
Net railway operating income, twelve months	
1951	\$942,696,259
1950	1,039,621,540
Net income, estimated, twelve months	
1951	\$693,000,000
1950	783,000,000
Average price railroad stocks	
February 11, 1952	56.80
February 13, 1951	60.30
Car loadings, revenue freight	
Five weeks, 1952	3,559,325
Five weeks, 1951	3,660,523
Average daily freight car surplus	
February 9, 1952	8,683
February 10, 1951	3,798
Average daily freight car shortage	
February 9, 1952	4,400
February 10, 1951	26,619
Freight cars delivered	
January 1952	8,642
January 1951	5,949
Freight cars on order	
February 1, 1952	120,251
February 1, 1951	144,758
Freight cars held for repairs	
January 1, 1952	95,425
January 1, 1951	93,840
Net ton-miles per serviceable car per day	
November 1951 (preliminary)	1,035
November 1950	1,017
Average number railroad employees	
Mid-December 1951	1,243,095
Mid-December 1950	1,277,119



In This Issue . . .

"BUNGLING FAILURE" is the conclusion reached in this issue's editorial review of the whole sorry mess of freight car steel allocations. "It would seem," says the editorial, "in order that some civilian activities may suffer little disturbance . . . the nation must be committed to a transportation capacity inadequate to meet a real defense emergency. This . . . invites the very emergency our whole preparedness program was intended to make improbable."

WHAT USERS THINK of current trends in refrigerator car design is told on pages 41, 42 and 43. Other feature articles describe the Long Island's new speed control system (page 37), and show how the Burlington keeps interested officers informed of progress on its new Centennial Cutoff (Page 44).

INCLUDED IN THE WEEK'S NEWS were the death of B. A. Dollens, general manager of the Electro-Motive Division of General Motors; a C. & O. order for 1,000 hopper cars; Emergency Board recommends granting the union shop and check-off to 17 railroad non-operating unions; a proposal for creation of a New Jersey-New York Rapid Transit Authority "to solve the problem of providing physical connections between New Jersey railroads and Manhattan Island"; and a special report completely absolving both the B. & O. and the Reconstruction Finance Corporation from "fraud, collusion or illegality" in proposal or consummation of the former's 1944 adjustment plan.

In Washington . . .

"NO COUNTRY IS STRONGER than its transportation system." With that system built around a core of railroads, "financial weakness" in the railroad industry creates a "military weakness" in the nation. So said D. L. & W. President William White in a February 14 address in Washington, D. C., in which he ascribed the financial weakness of the railroads to "the type of political thinking" that keeps them regulated as a monopoly, that prevents them from earning an adequate profit, and that "hamstrings regulatory authorities," and makes it impossible for them to "keep abreast" of the needs of the industry they regulate.

CLASS I RAILROAD EARNINGS for 1951 have been estimated at \$693 million after interest and rentals—about \$90 million, or 11.4 per cent, below net income for 1950. Net railway operating income,

before interest and rentals, was \$942.7 million, compared with \$1,039.6 million in 1950, while rate of return on net property investment declined from 4.23 per cent in 1950 to 3.7 per cent in 1951. Reason for the declines was an increase of 13.9 per cent in operating expenses, against an increase of only 9.7 per cent in gross revenues.

"LESS GOVERNMENT IN TRANSPORTATION and avoidance of nationalization"—from which it would be "just a short haul to socialism"—sum up the general position of the Chamber of Commerce of the United States, and explain why transportation problems have a "high priority" on its "work sheet." This was brought out during the chamber's "off-the-record" transportation forum last week. The chamber, its president said, stands ready to serve as a "clearing house" for competing carriers "to help solve problems of mutual concern."

IF DEREGULATION of transportation is desirable, says the Interstate Commerce Commission in its latest annual report (page 48) "appropriate amendments . . . would permit us to concentrate our present reduced staff upon the efficient and effective administration of the more limited statutory obligations assigned us by the Congress." As it is, the commission pointed out, "deregulation" is being accomplished indirectly through reduced appropriations for its work, which have been so slashed that only "about 60 per cent of the staff necessary for efficient and effective performance of the commission's duties is available."



T. A. BLAIR (above), chief engineer of the Atchison, Topeka & Santa Fe System and president of the American Railway Engineering Association, is the first chairman of the new Coordinating Committee on Physical Research just set up in the Operations and Maintenance Department of the A.A.R., to report directly to A.A.R. Vice-President J. H. Aydelott. The committee, as reported in the news pages, "will screen research programs . . . and arrange such priority among the projects as will insure the earliest possible conclusions concerning those which offer the greatest potential benefits or economies to the railroad industry."

A THOROUGH SURVEY of passenger operations on the Pennsylvania will be undertaken by Robert Heller and Associates, Inc., Cleveland, Ohio, management consultant firm. The survey, it is understood, will be similar to the study of New York Central passenger services also to be made by the Heller organization (Railway Age, February 11, page 18).

SOME 62 OF THE COUNTRY'S LARGE AIRPORTS have residential areas nearer their runways than does the Newark, N. J., airport—so says the New York Times in commenting on the latest recent fatal crash into private homes of a plane using Newark airfield. Thus, the hazard of falling planes near airports seems to be one of nationwide significance; and it will get plenty of attention, not all of it calm and objective either. The airlines are like the railroads in that their accidents are spectacular and always find themselves on page one—while the casualties to motorists from heavy-duty trucks, especially the "jackknifers," are noted way over in the back of the paper, if at all.

EVENTUAL ANNUAL PRODUCTION—by 1970 or thereabouts—of some 60 million tons of iron ore from beneficiated Mesabi taconites was predicted by Arnold Hoffman, mining geologist, in a recent address to the New York Society of Security Analysts. Thus, according to Mr. Hoffman, the Mesabi range would continue to be the major source of raw material for the country's expanding steel requirements.

WE'VE SEEN some 1951 maintenance-of-way figures of a notably well-maintained railroad, which does a thorough job of advance budgeting and scheduling its maintenance-of-way operations. The ratio to operating revenue was only a shade over 11 with depreciation included, and barely over 9 without depreciation.



NEWS



OF
THE
RAILROAD
WORLD

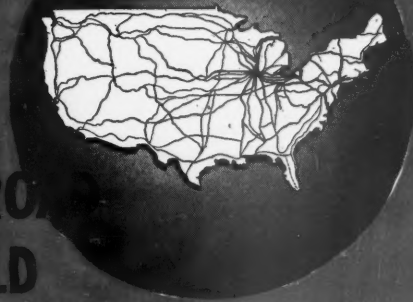


ILLUSTRATION BY JIMMY L. HARRIS

Railroads' "Financial Weakness" Creates "Military Weakness" in Nation, White Warns

D.L.&W president among speakers at Washington meeting where carriers got citation from Reserve Officers Association

Financial weakness in the railroad industry creates a "military weakness" in the nation, William White, president of the Delaware, Lackawanna & Western, warned in a February 14 address at Washington, D. C.

Mr. White spoke at a luncheon in Washington's Statler Hotel, where the Reserve Officers Association of the United States presented to the railroads a scroll which cited them for "outstanding and indispensable contributions to the security of the nation, over and beyond the call of duty in every period of national peril."

The scroll was presented by Lieutenant Colonel Oliver Gasch, Army reserve, who is president of R.O.A.'s D.C. Department; and it was accepted on behalf of the railroads by Robert S. Henry, vice-president of the Association of American Railroads. Railroad officers, executives of railroad labor organizations, and government officials were among guests at the luncheon.

Speakers, in addition to Mr. White, included James K. Knudson, administrator of the Defense Transport Administration; Brigadier General Andrew F. McIntyre, deputy chief of transportation, Department of the Army; and Colonel W. S. Carr, superintendent of the New Haven division, New York, New Haven & Hartford, who directed the Military Railway Service in Korea during the present war.

Leading up to his warning that military weakness results from financial weakness of the railroads, Mr. White expressed his fear that the railroads "have not done an adequate job to create a public understanding of the inherent value of a rail transport system that costs the government nothing beyond its minimum payments of charges for actual service performed."

As to the role of railroads in war, Mr. White asserted that there was no foreseeable war into which the nation might be drawn that would not be a "railroad war." No country, he added, is "any stronger than its transportation system, with that system built around a core of railroads to handle the masses of men and materials that cannot be moved in any other way."

"We are suffering a financial weakness," the D. L. & W. president also said, "because the railroads are still being regulated as a transportation monopoly and because they have not been permitted to earn an adequate profit throughout a long period of substantial traffic volume. If we condone a type of political thinking that prevents the railroads from earning a profit that is adequate to maintain their credit and to make capital improvements that enable better service and more efficiency, the resultant financial weakness becomes a military weakness."

This weakness, Mr. White continued, "is accentuated when the same type of political thinking hampers the regulatory authorities . . . so that for the lack of infinitesimal sums of money in relation to our overall governmental expenditures, the Interstate Commerce Commission has neither the staff nor the expert assistance to keep abreast of the needs of the transportation industry it regulates."

Mr. White noted that the railroads "indulge in protracted debates" with the I. C. C., and "do not always agree" with its decisions and orders. At the same time, he emphasized that the carriers concur in the "general opinion" that the commission is the "best administered commission" in the federal government.

Russian Conditions

Earlier in his address, Mr. White had talked of railroad conditions in Russia and of the deficit operations in France. His message's summary recalled such comments when it said:

"Nothing in our transport problem calls for the degrading operations indulged in by the Soviet government; nothing in it threatens the stability of our political institutions as in France, and nothing in it requires a dollar of federal appropriations. All that is required is a change in our state of mind and an awareness of the facts of business life as they must be applied to transportation—and a political atmosphere in which railroad management and the regulatory authorities are given the tools necessary, each in its own sphere, to do their job."

Colonel Carr said that his experience in Korea had "proved again" to him

that railroads "are a weapon of the first military importance—one of the mightiest weapons in our democracy."

During his tour of duty, the colonel, as he put it, "handled the railway transportation service during a lot of victories and a lot of retreats." He had previously encountered nothing like it "in my 45 years of railroading."

That the "Communists" counted on the Korean railroads "just as much as

we did" was evident to Colonel Carr when he noted that they "never destroyed any roadbed."

"Out there," the colonel also said, "you fight with the railroads. In battle after battle we actually unloaded troops, tanks, heavy guns and ammunition at the point where they were to go into battle because there was no other way to move them 25 or 100 miles from concentration areas up to the lines."

1951's Net Income Was \$693 Million

Estimated net income of Class I railroads in 1951, after interest and rentals, was \$693,000,000, the Bureau of Railway Economics of the Association of American Railroads announced last week. This compares with net income of \$783,000,000 in 1950.

Net railway operating income, before interest and rentals, was \$942,696,259 in 1951, as compared with \$1,039,621,540 the previous year, the bureau reported.

The 1951 net railway operating income represented a rate of return of 3.7 per cent on net property investment at the end of the year. The rate of return on property investment in 1950 was 4.23 per cent.

Both net railway operating income and net income figures were increased in 1951 by a credit adjustment of \$12,766,000 in income taxes, applicable to the war years 1942 and 1943, the bureau said. This adjustment went prin-

cipally to the Atchison, Topeka & Santa Fe (*Railway Age*, December 10, 1951, page 14).

Gross revenues in 1951 amounted to \$10,390,672,580, compared with \$9,473,093,128 in 1950, an increase of \$917,579,452, or 9.7 per cent. Operating expenses increased 13.9 per cent—from \$7,059,252,353 in 1950 to \$8,041,223,177 in 1951.

Sixteen Class I railroads failed to earn interest and rentals in 1951, of which eight were in the Eastern district, two in the Southern region and six in the Western district.

Class I roads in the Eastern district (including the Pocahontas region) in the year 1951 had an estimated net income of \$234,000,000, compared with \$253,000,000 in 1950. Those same roads in 1951 had net railway operating income of \$382,294,330 compared with \$390,632,649 in 1950.

Gross in the Eastern district in 1951

CLASS I RAILROADS—UNITED STATES

	Twelve Months Ended December 31	
	1951	1950
Total operating revenues	\$10,390,672,580	\$9,473,093,128
Total operating expenses	8,041,223,177	7,059,242,353
Operating ratio		
—per cent	77.39	74.52
Taxes	1,203,238,466	1,194,615,254
Net railway operating income (Earnings before charges)	942,696,259*	1,039,621,540
Rate of return (per cent)	3.70	4.23
Net income, after charges (estimated)	693,000,000*	783,000,000
*Increased by a credit adjustment of \$12,766,000 in income taxes, applicable to the war years 1942 and 1943.		

	Month of December	
	1951	1950
Freight revenue	\$689,298,215	\$673,436,830
Passenger revenue	88,238,433	79,271,125
Total operating revenues	902,695,493	927,812,572
Railway Expenses, taxes and rents	767,523,156	813,744,268
Net revenue from railway operations	253,651,265	282,390,836
Net railway operating income	135,172,337	114,068,304

totalled \$4,628,367,334, an increase of 10.6 per cent compared with 1950, while operating expenses totalled \$3,683,381,844, an increase of 12.9 per cent.

Class I roads in the Southern region in 1951 had an estimated net income of \$112,000,000, compared with \$130,000,000 in 1950. Those same roads in 1951 had net railway operating income of \$157,136,599, compared with \$168,713,064 in 1950.

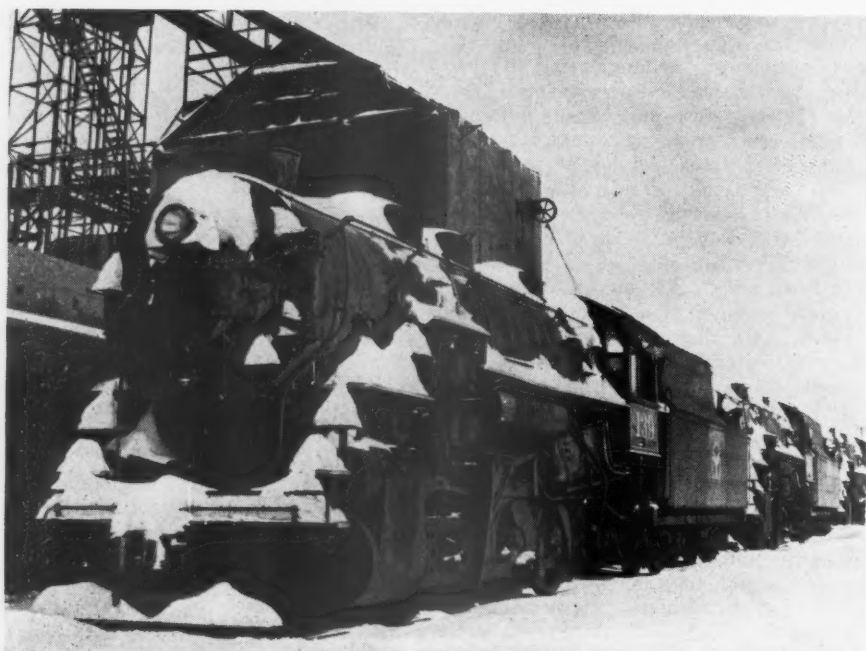
Gross in the Southern region in 1951 totalled \$1,455,358,317, an increase of 10.5 per cent compared with 1950, while operating expenses totalled \$1,093,597,460, an increase of 14 per cent.

Class I roads in the Western district in 1951 had an estimated net income of \$347,000,000, compared with \$400,000,000 in 1950. Those same roads in 1951 had net railway operating income of \$403,265,330, compared with \$480,275,827 in 1950. Both the net railway operating income and the net income for 1951 were increased by the credit adjustment of \$12,766,000 in income taxes.

Gross in the Western district in 1951 totalled \$4,306,946,929, an increase of 8.4 per cent compared with 1950, while operating expenses totalled \$3,264,243,873, an increase of 15.1 per cent.

The A.A.R. statement did not give December 1951 figures separately. It was in that month that the railroads made adjustments, amounting to about \$40 million, as required by the retroactive provisions, of the Interstate Commerce Commission order that ended accelerated amortization accounting.

The accompanying tabulation showing December figures was compiled from the monthly statement issued by the Bureau of Transport Economics and Statistics of the I.C.C. The bureau figures included no estimate of the month's net income.



THE BELT RAILWAY OF CHICAGO contributed the biggest single haul—more than 1,000 tons—of industrial steel scrap uncovered up to that time by the special committee on scrap collection of the Chicago Association of

Commerce & Industry, when it turned over, early in January, seven 0-8-0 switchers from 24 to 38 years old, plus a 150-ton locomotive coaling plant. The old steam locomotives are being replaced by new diesel-electrics.

Fiscal 1951 Reviewed by Bureau of Safety

The annual report of Director S. N. Mills of the Interstate Commerce Commission's Bureau of Safety for the fiscal year ended June 30, 1951, has been submitted to the commission. The report sets forth in the usual form the results of inspection of safety appliance equipment on railroads, together with information on hours of service of railroad employees, installation and inspection of signal systems, interlocking and automatic train-stop and train-control devices, investigation of accidents, prosecutions for violations of railroad safety laws and other activities of the bureau.

During the year under review, 1,156,408 freight cars, 31,584 passenger-train cars and 12,573 locomotives were inspected, as compared with 1,149,879 freight cars, 29,533 passenger-train cars and 12,647 locomotives in fiscal 1950. Of the 1951 total, 3.62 per cent of the freight cars, 3.57 per cent of the passenger-train cars and 3.22 per cent of the locomotives were found to be defective, as compared with the respective 1950 figures of 3.37 per cent, 3.74 per cent and 3.41 per cent.

Air brakes tested on 2,750 trains (consisting of 117,353 cars) prepared for departure from terminals were found operative on 117,196 cars, or 99.9 per cent. This percentage was attained, however, after 2,549 cars having defective brakes had been set out, and repairs had been made to brakes on 2,213 cars remaining in the trains.

Similar tests on 1,347 trains arriving at terminals with 75,179 cars showed that air brakes were operative on 97.7 per cent of the cars and that an average of approximately 1.3 cars per train were not controlled by power brakes.

According to the report, 674 reporting railroads and private car lines, which collectively own 2,150,876 freight cars, have equipped 1,968,375 such cars with power brakes which comply with specifications set out in the commission's order of September 21, 1945. That order has been amended to grant more time for compliance. Under the most recent amendment, of June 5, 1951, all railroad-owned cars must be equipped by June 30, 1952, while non-railroad owners have until December 31, 1952. As of March 1, 1951, 92.2 per cent of railroad owned cars, and 86.3 per cent of cars owned by private car lines, were thus equipped.

In the matter of geared hand brakes, the report noted that the Association of American Railroads has issued certificates of approval for 31 types — 19 vertical wheel types, nine horizontal wheel types, and three lever types.

Hours of Service

During the fiscal year 1951, 185 of the 656 railroads filing hours-of-service reports reported 9,519 instances of all classes of excess service, an in-

crease of 2,362 as compared with the previous year. The 1951 figure included 2,633 instances of excess service by train-service employees subject to the 16-hr. provision of the law, and 6,886 instances of excess service by operators and other employees subject to the 9-hr. and 13-hr. provisions of the law.

Landslides, high water, fire and adverse weather conditions; wrecking and relief service, and collisions and derailments were principal causes of 2,295 instances in which train-service employees remained on duty longer than 16 consecutive hours. Sickness, death and personal injury accounted for 4,097 of the 6,886 instances of excess service by operators and dispatchers.

During the year, 144 cases of violation of safety-appliance laws, comprising 494 counts, and six cases of violation of the hours-of-service law, comprising 17 counts, were transmitted to United States attorney for prosecution.

As of January 1, 1951, there were 106,383.9 miles of road (138,889.2 miles of track) equipped with block-

signal systems, including automatic block signals on 77,251.1 miles of road (108,604.8 miles of track). On the same date, there were 4,352 interlockings in operation and 11,187.3 miles of road (21,720.7 miles of track) equipped with automatic train-stop, train-control and cab-signal devices.

Train Communication

According to reports submitted by the carriers, there were 77 train communication systems in service on lines of 37 different railroads on January 1, 1951, midway of the fiscal year. Included in these systems were five installations providing radio telephone service for passengers through telephone company mobile radio facilities. There were also 143 installations in service in yards and terminals on 57 railroads, with 113 of such installations providing communication between fixed stations and switching engines. Ten of the installations provide communication between portable pack radios, between fixed stations and portable pack radios, and between fixed station and mobile units other than engines used in different yard operations.

Of the 47 collisions investigated by

B. A. Dollens of E-M-D Dies at 50



B. A. Dollens

B. A. Dollens, vice-president of General Motors Corporation and general manager of its Electro-Motive Division, died at Hinsdale, Ill., on February 9, at the age of 50. He had been hospitalized since February 4, when he suffered a cerebral hemorrhage.

Mr. Dollens had just completed several months' work in Washington, D. C., where he had helped to present facts on behalf of the locomotive building industry's effort to secure reasonable allocations of steel and other essential materials.

Mr. Dollens' direct contribution to the railroad industry is perhaps little known. As a fellow officer of the Electro-Motive organization has expressed it: "He was an untiring producer of innovations for the relatively unchar-

tered field of mass locomotive production." Because of this *forte*, the Electro-Motive organization today points to a horsepower-unit cost of its locomotives that remains within five per cent of the World War II figure — despite concurrent labor and materials costs which have increased upwards of 75 per cent. At the same time, his constant emphasis on production research has yielded a far better diesel locomotive than that which the division produced prior to his first association with it in 1946.

Mr. Dollens was graduated from Purdue University in 1925 with the degree of Bachelor of Science in Mechanical Engineering. In June 1951 the university awarded him an honorary degree of Doctor of Science in Mechanical Engineering. He entered the employ of the Remy Electric Company (now Delco-Remy) at Anderson, Ind., and advanced steadily through this division of the General Motors organization until February 1944, when he became manager of the corporation's battery operations and foundries. On July 1, 1945, he became general manager of the Saginaw Malleable Iron Division at Saginaw, Mich. He was then the youngest general manager in General Motors. He came to Electro-Motive in November 1946, as assistant general manager, and was appointed general manager in August 1950. Simultaneously he was elected a vice-president of G.M.

Among his many outside civic and business activities, Mr. Dollens served on the governing board of the Railway Business Association.

the Bureau of Safety, 26 occurred on lines operated by the block system, 14 on lines operated by the timetable and train-order system, and seven in locations where yard and miscellaneous operating rules were in effect.

The collisions resulted in death of 158 persons and injury to 1,492. The bureau also investigated 18 derailments, which altogether resulted in deaths of 121 persons and injury to 701. In six accident reports, the bureau recommended in four cases, "That carrier provide adequate protection for the movement of track motorcars;" and in the other two cases, "That carrier install an automatic train-control system."

During the calendar year 1950 there were 4,000 accidents at highway grade crossings, which resulted in death of 1,576 persons and injury of 4,368. There were 62 derailments of trains as a result of collisions with automobiles, resulting in death of 23 persons and injury of 99. Casualties to persons on trains from derailments and other train accidents at highway grade crossings consisted of four killed and 66 injured.

James E. Dowell, a brakeman on the Southern, was awarded a Medal of Honor during the year for heroism in rescuing a 16-month-old child from the path of a locomotive near St. Charles, Va., on July 10, 1950.

government take it over—from the hub cap of motor transport to the caboose of the freight train."

The "short-haul-to-socialism" theory is the way "those folks figure it," Mr. Hulcy went on, adding: "And the way I figure it—that's what they want."

The Chamber's general position is one calling for "less government in transportation," he also said, noting that "Chamber policy calls for one permanent transportation agency responsible directly to the Congress."

Meanwhile, the Chamber would like to see differences between carriers "straightened out on the anvil of the conference table instead of lugging them to the doorstep of government." Thus, it "stands ready to serve the transportation industry at all times as a clearing house for the competing carriers to help solve problems of mutual concern."

Threat of Socialism Makes U. S. Chamber Give High Priority to Transport Problems

From nationalization of the transportation industry it would be "just a short haul to socialism," and that is why the Chamber of Commerce of the United States gives transportation problems a "high priority" on its "work sheet."

This statement of the Chamber's position was made by its president, D. A. Hulcy, in a February 13 address at a dinner session of the "National Transportation Forum," which was held in Washington, D. C., last week under the auspices of the Chamber's Transportation and Communication Department.

The forum's sessions, other than the dinner meeting, were off-the-record" discussions by invited representatives of carriers and users of the various forms of transportation.

Looking over the present situation, Mr. Hulcy found that the transportation industry "as a whole" is "caught between two pincers of a paradox."

"Our carriers," he continued, "are handling a tremendous volume of traffic—but finding it painfully difficult to attract needed capital because of inadequate net earnings. A sharp reduction in traffic, if that should come about, would probably mean bankruptcy for many—and a call for outside assistance from others."

"Some folks in this country are gloating over this paradox in book-keeping like so many vultures on the trail of a prairie schooner in the desert. They hope there is nothing trivial wrong with our transport industry. For they'd like nothing better than to see

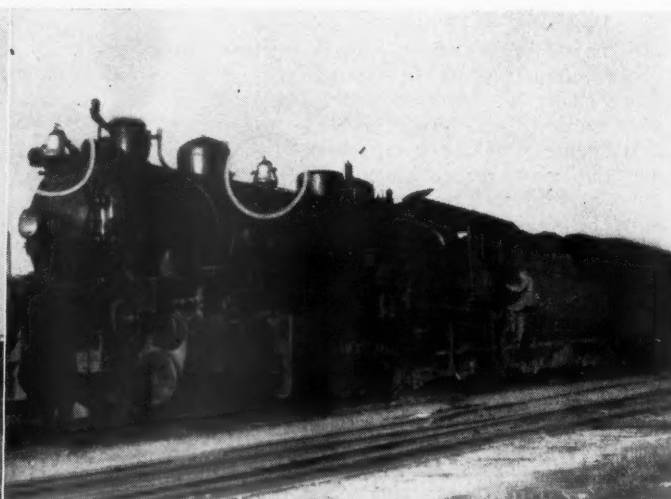
I.C.C. Approves Increased Commuter Fares in 5 Areas

The Interstate Commerce Commission has authorized establishment of increased commutation fares by railroads serving the metropolitan areas of New York, Philadelphia, Pa., Harrisburg, Pittsburgh, and Chicago. Authoritative estimates indicate that the higher fares will yield approximately \$3,800,000 a year to the railroads involved—the Pennsylvania; Delaware, Lackawanna & Western; Erie; Central of New Jersey; Reading; New York Central; Pennsylvania-Reading Seashore Lines; New Jersey & New York; Pittsburgh & Lake Erie; Baltimore & Ohio; and Lehigh Valley.

The new scale authorized by the commission is the same as that proposed by the railroads, except for distances less than 13 miles, where the



LOOK AGAIN!—THESE LOCOMOTIVES HAVE TWO BELLS.—The train is Mississippi Central No. 51. It was about to depart—double-headed—from Hattiesburg, Miss., one afternoon several weeks ago when a roving *Railway Age* editor snapped these pictures. The dual-bell phenomenon was later explained by President L. E. Faulkner as follows: "We believe we are the only railroad in the world having locomotives



equipped with two bells. The front bell is what we call a continuously ringing bell. After a very bad crossing accident several years ago, we added a second bell on the front of all our locomotives and equipped it with a device making it impossible for the engineer to control it. Our purpose was to combat the argument that lawyers for the complainants always make, i.e., 'the bell wasn't ringing'."

new scale will be lower than the proposed basis.

Under the new scale, the cost of unrestricted monthly commutation tickets will range from \$8 where the distance is one mile to \$28.05 where the distance is 40 miles. Comparable present fares range from \$6.80 to \$25.05. Charges for other commutation tickets, and other types of multiple-ride tickets, will be related percentagewise to the "unrestricted-book" basis.

The commission's report, by Chairman Rogers, was in I. & S. Docket No. 5950, which also embraced No. 30600. Commissioner Aitchison filed a separate expression, concurring in part. He agreed with that part of the majority report which found that the scale proposed by the railroads had not been justified; but he said there was no basis in the record for finding that the increases authorized had been justified.

The New Jersey Department of Public Utilities has authorized approximately comparable increases in intrastate commutation fares for most of the roads operating such service within that state.

Third-Quarter Construction Applications Due March 15

Applications for Defense Transport Administration authorization to commence construction, and for allotment of controlled materials under C.M.P. Regulation 6, should be filed at least 105 days before the beginning of the quarter in which the materials are to be delivered.

This was announced recently by F. Berkley Robins, director of the D.T.A. Equipment and Materials Division, who also noted that such a schedule means a March 15 deadline for the filing of applications for this year's third quarter.

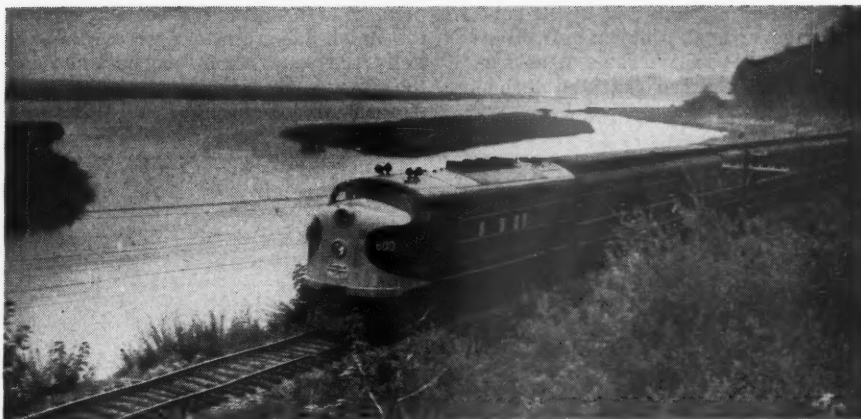
Army Turns Down Renewed Wage Plea by Conductors

The Army has turned down a request by the Order of Railway Conductors for another "interim" wage increase while the union's wage-rules dispute with the railroads continues.

President R. O. Hughes of the conductors wrote Assistant Secretary of the Army Karl R. Bendetsen, asking the Army to extend to all O.R.C. members a wage increase similar to that which other railroad employees have received in settlements with the carriers.

Mr. Bendetsen replied in a February 7 letter that the Army has the railroad wage matter "under continuous scrutiny." He did not indicate, however, that any increase for the O.R.C. would be forthcoming.

Instead, Mr. Bendetsen reiterated the previously stated position of the Army—that it "is not now, never has been, and will not become" a party to the dispute. He said the Army, which took over the railroads in August 1950,



NO MORE TRAINS TO THE BEACH

The once heavily traveled line of the Spokane, Portland & Seattle from Portland, Ore., to Seaside was retired from passenger service on January 15. Despite operation of a neat diesel-hauled train, with modernized, air-conditioned equipment, on a convenient daily schedule, patronage dwindled almost to the vanishing point. Even the business interests at Astoria, main point served on route, admitted that the railroads' passenger potential was nil.

Days prior to completion of the Sunset highway to the coast and improve-

ment of the lower Columbia River road saw long and frequent summer commuter trains and week-end excursions on the 118-mile run, by which "practically everybody" in Portland sought the pleasures of the seashore. When the railroad-owned Great Northern Pacific Steamship Company formerly ran the twin ships "Great Northern" and "Northern Pacific" between Flavel (near Astoria) and San Francisco, boat trains on the Seaside line of the S.P. & S. connected with them; the lower photograph shows the boat-train transfer facilities.

"did not seek this responsibility; does not want it in any event, and has more than enough to do without it."

Mr. Hughes' letter to the Army suggested that the union is agreeable to any "fair and reasonable solution" to its dispute with the carriers. It offered to submit the entire dispute for arbitration. As an alternative, it asked the Army to grant the full wage increase offered by the carriers, "leaving other items . . . for settlement by arbitration or other procedures provided by law."

The letter said the Army has authority to put a wage increase into effect, and cited the use of such power a year ago. At that time the Army ordered a wage boost for all operating employees involved in the pending wage-rules dispute.

This included members of the Broth-

erhood of Locomotive Engineers, Brotherhood of Locomotive Firemen and Enginemen, Brotherhood of Railroad Trainmen and the O.R.C. (*Railway Age*, February 12, 1951, page 121).

Following this latest exchange of letters between the O.R.C. and the Army, the National Mediation Board again called joint meetings with the union and the carriers in an effort to find a way for settling the two-year-old dispute. These meetings were continuing as this issue went to press, but no progress had been reported.

Meanwhile, in the case of the B. of L.F.&E., President D. B. Robertson of the union sent a letter to all members of Congress, advising them of latest development in the Firemen's case.

The urgent duty of the Administra-

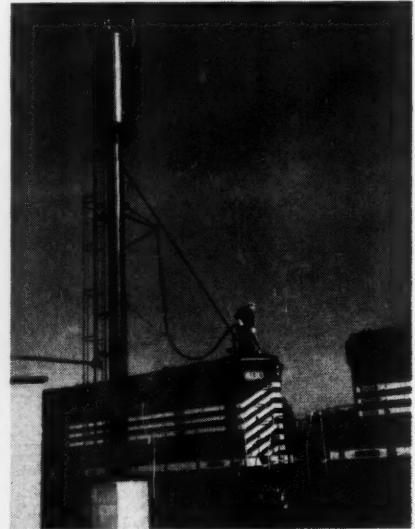
tion is to find a quick and a just solution to the critical problem, Mr. Robertson said. He said it came as no surprise to the Firemen that the recommendations of the emergency board ap-

pointed to hear their case, and which the union has rejected, were substantially the same as those contained in the White House "Memorandum of Agreement" of December 21, 1950.

Senator McFarland, Democrat of Arizona and majority leader in the Senate, met with President Truman February 8 and after the meeting reported that he had asked the President



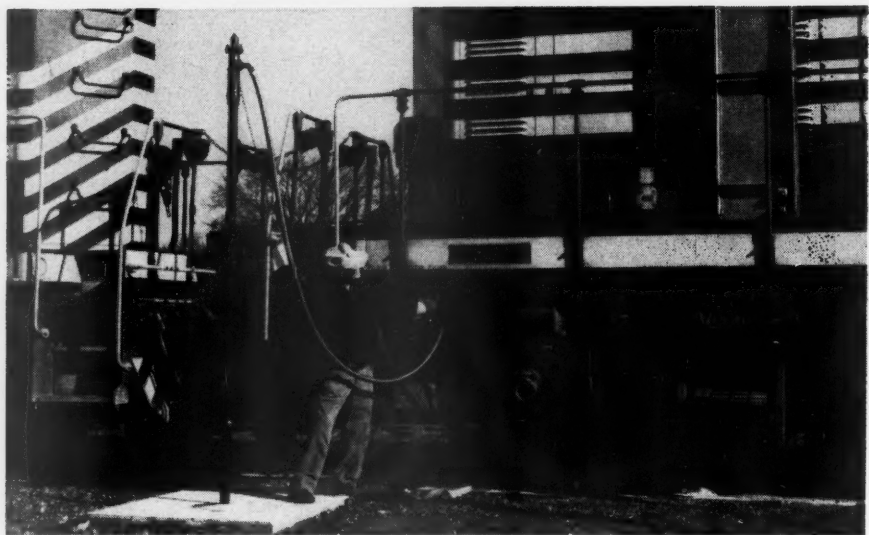
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THE NICKEL PLATE OPENS NEW FACILITIES AT PERU, INDIANA

Opening, in January, of the Nickel Plate's new diesel servicing facilities at Peru, Ind., marked completion of a \$340,000 improvement program begun there over a year ago. Service on the Nickel Plate's freight-only Indianapolis division (on which Peru is located) was fully dieselized last year with acquisition of 13 1,500-hp. general-purpose locomotives at a cost of \$2 million. Prior to conversion to diesel power the road required no engine-service facilities of its own at Peru, as its steam locomotives were accommodated in the nearby engine terminal of the Chesapeake & Ohio.

In addition to the new engine-service facilities shown in the accompanying photographs, the Nickel Plate reopened and remodeled its Peru freighthouse, which had not been in use since 1935.

(1) Engine storage and servicing tracks, service building and sandhouse of the newly completed engine-service center. Note the double wheel storage tracks and two-ton steel gib crane in the foreground, which serve the car repair track at the right. In the yard, five classification tracks with a capacity of 152 cars, and space for two additional tracks, have been provided.

(2) One-stop servicing for sand, fuel and water is a time-saving feature of the new layout. The diagonal pipe from the sand tower permits simultaneous

sanding of a third locomotive on the adjacent engine storage track. The elevated storage tank holds five tons of sand.

(3) Fueling is here conducted without moving the locomotive from the position shown in the previous picture. Note the unusual counter-balanced fueling crane. A second similar crane makes it possible to fuel two diesel units at the same time.

(4) Watering is done from a standpipe and hose located just a few feet from the base of the sand tower.

One end of the original freight station building has been converted into an office and locker room. The building's brick walls have been reinforced and concrete floors have replaced the former timber flooring in the freighthouse

area, which has a total of 2,500 sq. ft. of floor space. A mechanically operated warm air heating system and fluorescent lighting have been installed, and a new concrete platform and connecting ramp have been added.

to make a new move to end the long stalemate between the railroads and the three operating brotherhoods. He said he was "encouraged" that the President will "do something" to help end the disputes.

Need Man Who Knows Needs, Roads Tell N.P.A.

An official "conversant with railroad essentiality" should be appointed to the Requirements Committee of the Defense Production Administration, the Railroad Industry Advisory Committee last week told the National Production Authority.

The D.P.A. Requirements Committee is the unit that helps establish quarterly production programs, and thus sets the amounts of controlled materials to be allotted to various industries.

Second quarter allotments of scarce metals for the railroad industry do not reflect the industry's "essentiality," and are adequate only for the replacement of obsolescent facilities, the advisory committee told N.P.A.

Allocations must be sufficient to allow some "stockpiling" of railroad equipment in anticipation of any emergency, the committee said. It noted that second quarter allotments will permit construction of 700 locomotive units, 18,000 freight cars and 400,000 tons of rail.

The committee also recommended that it be consulted by D.P.A. and the Defense Transport Administration before regular quarterly production programs for railroad equipment are made.

Tariff Improvement Is "Within Reach," Baxter Says

"With understanding, sympathy and bigness, a large measure of genuine and lasting improvement is within reach" in the simplification of freight tariffs, Charles S. Baxter, chairman of the Railroads' Tariff Research Group, told the Miami Valley Traffic Club at its 30th annual dinner at Dayton, Ohio, on February 14.

Mr. Baxter coupled his forecast of improvement, however, with a warning that "there are limits beyond which we cannot hope to reach," because "freight tariffs relate to an important aspect of our economy and it is wishful thinking to expect that tariffs could remain completely simple while the economy was growing vastly more complex. . . . Some factors of tariff complexity are merely symptomatic of our complex modern world."

Obtaining any large measure of tariff improvement, Mr. Baxter declared, will require from railroads, regulatory commissions and shippers the kind of "bigness" which "puts aside expediency and petty things and promotes solutions to these problems with a singleness of purpose dedicated to the greatest common good. . . . The tariff maker and the tariff user must see each other in the same mirror. Each must have the bigness to comprehend the other's

problems and viewpoints." As examples he cited the matter of routing as "a problem of enormous proportions." Shippers, he said, want "a multiplicity of routes" for occasional extreme situations, while "the great bulk of their traffic moves over the small number of direct service routes"; railroads "send in routes which no shipper in his right mind would ever use"; and "there is no more prolific source of detail routing than the rulings of the [Interstate Commerce] Commission in administering the fourth section."

Preceding his discussion of the tariff situation, Mr. Baxter urged his audience to "assist in finding appropriate solutions to the problem of inadequate revenues" for the transportation industry. "The mere mention of the failure of the transportation industry to prosper proportionately [with other industries] is enough to signal the imminence of crisis"—a fact which "assumes compelling significance when there is placed beside it the further fact that more transportation service is being rendered than ever before."

"We must," he declared, "find an American solution to the problem of inadequate railroad revenues" as distinguished from the "intolerable" results of nationalization in France or in Great Britain. The problem, he said, "challenges railroad management . . . challenges regulatory bodies . . . challenges the public."

Over-Regulation of RRs Called Step to Socialism

"If bureaucracy is permitted to choke railroads into a hopeless state and to prevent their healthy operation at the high point of efficiency to which they have grown under the competitive enterprise system, the country will lose services and profits of incalculable value," L. W. Horning, vice-president, personnel and public relations, of the New York Central, said in Bridgeport, Conn., on February 13. Speaking before the city's Traffic Association, Mr. Horning warned that continued bureaucratic stifling of railroad management will result in "the first long step toward the poverty of socialism so evident in every European country."

"With your support," he told the association, "this will not occur, however difficult the fight for perpetuation of common sense in government and the preservation of the essential element of our industrial strength under the American competitive system may be."

Shipper-Carrier Cooperation Urged

Loss and damage during shipment of its products costs American industry over \$250,000,000 a year, Henry Pratt, general traffic manager of the Crucible Steel Company, said in New York on February 11. Addressing the

monthly dinner meeting of the New York chapter of the American Material Handling Society, Mr. Pratt outlined a three-point program to reduce the loss-and-damage bill: Closer cooperation between shippers and carriers to develop mutual understanding of problems and responsibilities; teaching more effective methods of packaging and handling; and closer supervision of personnel actually handling freight.

Other speakers who addressed the meeting, moderator of which was Vincent J. Reade, of Whitehead Metal Products, Inc., were: F. C. Dansereau, engineer, Freight Loading and Container Section, Association of American Railroads; Joseph Adams, vice-president, U. S. Trucking Corporation; and Paul J. Keeler, general manager, John W. McGrath Corporation.

26 Motor Carriers Want To Drop Explosives Case

Twenty-six motor carrier applicants in the so-called "explosives case" have asked the Interstate Commerce Commission for permission to withdraw their applications.

The latest group to withdraw did so as hearings in the case were reopened in Washington, D. C., on February 13. Nine trucking firms told I.C.C. Examiner B. E. Stillwell, who is hearing the case, of their desire to get out.

Earlier, in a letter to Director W. Y. Blanning of the I.C.C.'s Bureau of Motor Carriers, eight others asked to be dismissed. In their letter they said the voluminous record in the case, and the present state of the proceedings, has led to the conclusion that it would be best to withdraw. They charged the railroads with parading the issues "up and down in the nation's press" in a move to stir up public opinion against the trucks.

Hearings in the "explosives case" began last September in Chicago, Ill. The proceeding is one in which, originally, some 58 motor carriers (mostly common carriers) were seeking permission to transport explosives over the highways. (*Railway Age*, December 31, 1951, pages 48-51).

Yard Operation Task Force Established on Southern

Establishment of a new department which will have general supervision over the Southern's yard and terminal operations was announced last week by that road's president, Harry A. DeButts. To head up the new department, David C. Ferguson was appointed to the newly created position of assistant vice-president, yards and terminals, with headquarters remaining at Atlanta, Ga., where he has been serving as the Southern's superintendent of terminals.

Mr. DeButts said the new department will be staffed by "shirt-sleeve workers," and will "function as a 'task force' having as its 'mission' the improvement of all phases of yard and terminal operations throughout the sys-

tém." The staff members, he added, "will actually live on these facilities day and night, studying the entire operation and seeking ways to further improve our service to shippers." Mr. DeButts' statement also said:

"Because railroad freight cars usually spend about as much time standing around in yards as they do traveling between terminals, the immediate goal of the new department will be that of examining schedules, coordinating movements between yards, and finding ways to reduce 'dead' time to a minimum. Better utilization of equipment and faster service to shipper should result. At the same time the studies will lay the foundation for future service improvements.

"In recent years we have invested \$120 million in new diesel power and our trains are getting over the road better than ever. We also have been modernizing and building new yards at a cost of about \$17 million. This yard work has been going on at the same time that we have been handling one of our heaviest traffic loads, and it has resulted in some unavoidable delay and inconvenience to our customers. Now that the work is well on the way to completion, the new department will see to it that our methods and practices keep pace with the physical improvement of our yards."

E. G. Plowman Honored

E. G. Plowman, vice-president in charge of traffic of the United States Steel Corporation, has been awarded the Certificate of Merit, the highest award given by the Defense Department for civilian service.

The award was in recognition of Mr. Plowman's service as the first director of the Military Traffic Service, and, subsequently, as consultant on transportation to the secretary of defense.

The secretary, Robert A. Lovett, presented the certificate to Mr. Plowman at a Pentagon ceremony on February 12.

W.P. Switchers Getting Radio Equipment

The Western Pacific has installed radio communication between yard offices and switching locomotives in the San Francisco, Oakland and Sacramento switching districts. Similar installations are expected to be complete by April 1 at San Jose, Stockton, Oroville, Keddie and Portola, and at Elko, Nev. When the program is completed, some 30 switchers will be in contact with district yardmasters on a 24-hour-a-day basis.

The transmitters have a power of 10 watts and operate on a frequency of 160.05 megacycles. Transmitters antennas are located so that contact can be maintained at all points within each switching district.

Clapp Marine Research To Be Carried On

Despite the recent death of Dr. William F. Clapp, founder of the marine research laboratory that bears his name at Duxbury, Mass., directors of the organization have announced that its work will be continued. A. P. Richards, who has been vice-president and principal assistant to Dr. Clapp for the past 16 years, has been elected president and director. He will carry on all the activities and research in marine deterioration to which Dr. Clapp had devoted most of his life as a scientist.

Railroad engineers with wharfage or other marine installations under their jurisdiction have long followed Dr.

MORE NEWS ON PAGE 53

Additional general news appears on page 53, followed by regular news departments, which begin on the following pages:

Organizations	56
Supply Trade	56
Equipment and Supplies	56
Financial	57
Railway Officers	58

Clapp's studies of the damaging action of bacteria and fungi, salt water corrosion, etc. Under Mr. Richards, the laboratory will maintain its collection of specimens and its museum of examples of destruction by marine borers.

The laboratory will also continue development and evaluation of methods to combat destructive organisms.

D.T.A., I.C.C. Enter Pact For Joint Use of Personnel

The Defense Transport Administration and the Interstate Commerce Commission have entered an agreement for the joint use of personnel of the I.C.C. Bureau of Water Carriers and Freight Forwarders by D.T.A.'s Inland Water Transport and Port Utilization divisions. This was announced February 12 by D.T.A. Administrator James K. Knudson, who is also a member of the I.C.C.

"The cost of work done by the bureau for the D.T.A. will be paid from a working fund provided by the D.T.A. for that purpose," the announcement also said.



WEST COAST SHIPPERS OBSERVE how the Western Pacific's new Compartmentizer equipped box cars work out under service conditions. The cars shown here are part of a fleet

of 20, recently delivered by the Pullman-Standard Car Manufacturing Company, designed for l.c.l. and mixed commodity carload lading (*Railway Age*, December 10, page 18).

DO OR DON'T THE RAILROADS NEED MORE FREIGHT CARS?

In July 1950, right after the beginning of the Korean war, the Class I railways owned a total of 1,727,873 freight cars. They were well aware of the implications of the Korean situation and, at an Association of American Railroads meeting at Chicago on July 28 of that year, at which virtually all members were represented, they pledged themselves to a program calling for a monthly production of 10,000 new cars from the car builders and company shops, extensive rehabilitation of old cars, and a reduction in bad orders from 6.5 per cent to 5 per cent. This program was to increase car ownership by 122,000 units, bringing the Class I ownership up to 1,850,000 cars.

At that time there was no difference of opinion between the railroads and both the legislative and administrative branches of the government as to the need of the railroads for more cars. In mid-August 1950, car shortages were running upwards of 30,000 a day. At a conference called by Senator Johnson of Colorado, chairman of the Senate Committee on Interstate and Foreign Commerce, Interstate Commerce Commissioner J. Monroe Johnson and A.A.R. President Faricy stated jointly that they had assurances from government and industry of assistance in obtaining steel for their enlarged car-building program.

On October 12 Defense Transport Administrator James K. Knudson submitted a proposed steel allocation calling for building "a minimum of 227,400 new freight cars" by June 30, 1952. On October 26, 1950, the National Production Authority announced a program to provide steel products in sufficient quantities during the first quarter of 1951 to build 10,000 new cars a month, plus steel for repairs and maintenance. This was accepted as a minimum program to provide transportation for civilian and defense needs and to provide reasonable protection should a full war emergency develop.

At about this time it became evident that the government defense program contemplated a build-up toward the latter part of 1951, which would cause its maximum disturbance of the civilian economy during 1952, then level out and gradually restore the civilian economy during 1953.

What happened during 1951 needs only brief review. In February the N.P.A. advised the steel producers that steel allocations for May would provide for 9,000 new cars. In mid-March it was announced that allocations sufficient to increase production to 10,000 cars a month were expected to be made in June. Just before this announcement Senator Thye, speaking in the Senate, said he had written to Director Charles E. Wilson of the Office of Defense Mobilization urging the establishment of the 10,000-car program. In April the June allocation was confirmed and a meeting of senators and representatives from four northwestern grain states were assured that N.P.A. would allocate steel for new freight cars as fast as the car builders could build them.

Steel Allocations Cut

Late in May steel allocations were announced for the third quarter which would cut new car production to about 7,600 a month, but within a week Mr. Knudson announced that an increase in third-quarter production to about 9,500 cars a month would be possible. Allocations for fourth-quarter production contemplated an average output of 9,500 cars a month.

The railroads backed with orders their July 1950 program. Orders for over 210,000 cars for domestic service were placed with the builders and company shops by the railroads and private car lines during the second half of 1950 and the year 1951. Bad order cars were 5 per cent or less for six months and a few tenths higher

during the remaining months. During the same period a total of about 126,000 cars for domestic service were delivered, an average of about 7,000 cars a month. But during 1951, because of necessary retirements, Class I railways increased their net freight car ownership by only approximately 31,000 cars.

What are the prospects for 1952? Speaking before the Northwest Shippers Advisory Board at the end of January, Mr. Knudson indicated that allocations will permit a production of 9,000 cars a month in the first quarter, 6,600 in the second quarter, and 5,600 in the third quarter. This dooms the railways' achievement of an increased Class I ownership of 122,000 cars to some indefinite time in the future, presumably after the emergency has passed. Such allocations will limit production during the latter part of the year to little more than enough cars to replace retirements.

If the railroads are to increase their ownership appreciably under such a program, it will be at the expense of retirements. These used-up cars, retained in service, will be expensive to maintain and will increase the difficulty of maintaining a low bad-order percentage. In other words, these superannuated cars would be more useful if devoted to alleviation of the steel scrap shortage than if retained as operating units. The limit imposed on production faces the car builders with the hard decision as to whether or not all freight-car-building facilities can be continued in operation throughout the year. Once a plant is closed, it will take months to get it back into service and its production built up to capacity.

Why the Change in Attitude?

Why this change in attitude by governmental authorities toward the railroads? The government is now setting back its defense objectives by at least a year in favor of reducing the disturbance of the civilian economy. But the railroads, it would seem, are expected to put themselves on an emergency basis by retaining worn-out cars if they expect to increase freight-car ownership, and the railroads and their customers by resorting to weekend overtime for car loading and unloading.

As a matter of fact, railroad transportation was on an emergency basis throughout 1951. Car shortages were continuous throughout the year. The largest daily shortages of box cars occurred during January to April, inclusive, ranging from just under 10,000 to 27,000. During the remainder of the year there was no month in which there were not reports of over 4,000 and in three months the maximum was well over 6,000 box cars. Daily shortages of all open-top cars were also high during the first half of 1951 and there were substantial shortages throughout the remainder of the year.

In his report to the President early in January, Defense Mobilizer Wilson said that the railroads in 1951 were able to meet all essential requirements because of acquisition of new cars and new diesel-electric locomotives, a reduction in the number of cars under repairs, and somewhat more efficient utilization. His expectation for

1952 that increasing car requirements may result in increased car shortages suggests that some members of Congress may be extremely busy next summer meeting with irate shippers.

So it would seem that, in order that some civilian activities may suffer little disturbance, transportation capacity must be curtailed, the capacity of the car-building industries to produce must be jeopardized, and the nation must be committed to a transportation capacity inadequate to meet a real defense emergency. This bungling failure to put first things first, exposed for the whole world to see, invites the very emergency our whole preparedness program was intended to make improbable.

PROFITS ARE OVER-STATED

Wage increases are inflationary even if they can be "taken out of profits" and are not reflected in increased prices for the products of the industry which raises wages. This fact is emphasized by Professor Sumner H. Slichter of Harvard in a letter published in the New York Times of February 10—the reason being that general wage increases result in buying pressure, and hence higher prices, on consumers' goods. Besides, Professor Slichter adds, profits of most corporations are currently overstated because of "unsatisfactory methods of accounting," which "base depreciation charges upon the original cost of plant and equipment rather than upon the replacement cost." Continuing, Professor Slichter says:

"Corporations which count a rise in the cost of replacing inventories as a profit and which base depreciation charges upon original cost rather than replacement cost owe it to their stockholders and to the general public to supplement their published income statements with information showing (1) the extent to which profits merely represent a rise in the cost of replacing inventories and (2) the extent to which depreciation actually charged is below the amount that would have been charged had depreciation been based upon replacement cost rather than original cost."

The taxing authorities and the regulatory commissions should heed this warning. The failure of such people—and the labor unions—to realize that industry has got to be allowed to earn enough to maintain the integrity of its tools of production is likely, one of these days, to start a downward trend in the living standards of which this country is justly proud.

At present tax rates the railroads have to earn more than \$2 of net income before taxes, in order to have \$1—not just to improve their plant—but to apply toward the 50 per cent or more of the cost of replaced equipment, which is not covered by depreciation charges on retired units. When a \$2,000 box car is replaced by a \$6,000 box car, the railroads have to find, somewhere, \$4,000 of new investment funds.



Wayside automatic block signals are the basis of speed control on the Long Island



The cab speed indicator is just below the window in the engineman's cab.

Speed Control Installed on the Long Island

This \$6,000,000 project includes new safety system on 165 track-miles with 42 locomotives and 355 multiple-unit cars equipped with two-speed three-indication indicators; speed control; warning whistle; speed governor; and automatic brake application equipment

A continuous two-speed, three-indication, speed control signal system is now being installed on 162 track-miles on the Long Island. Main lines and branches of this railroad extend throughout Long Island, with a total of 335 route-miles, including 522 miles of main passenger tracks. In New York City, Long Island trains terminate in an underground track layout in Pennsylvania Station. From this station, tunnels extend eastward under part of Manhattan and under the East river to Sunnyside yards, these tracks being used jointly with the Pennsylvania and the New York, New Haven & Hartford. Exclusive Long Island operation starts at Harold Avenue interlocking, which is in Long Island City, about 4 miles east of Pennsylvania Station in New York.

Sections Being Equipped

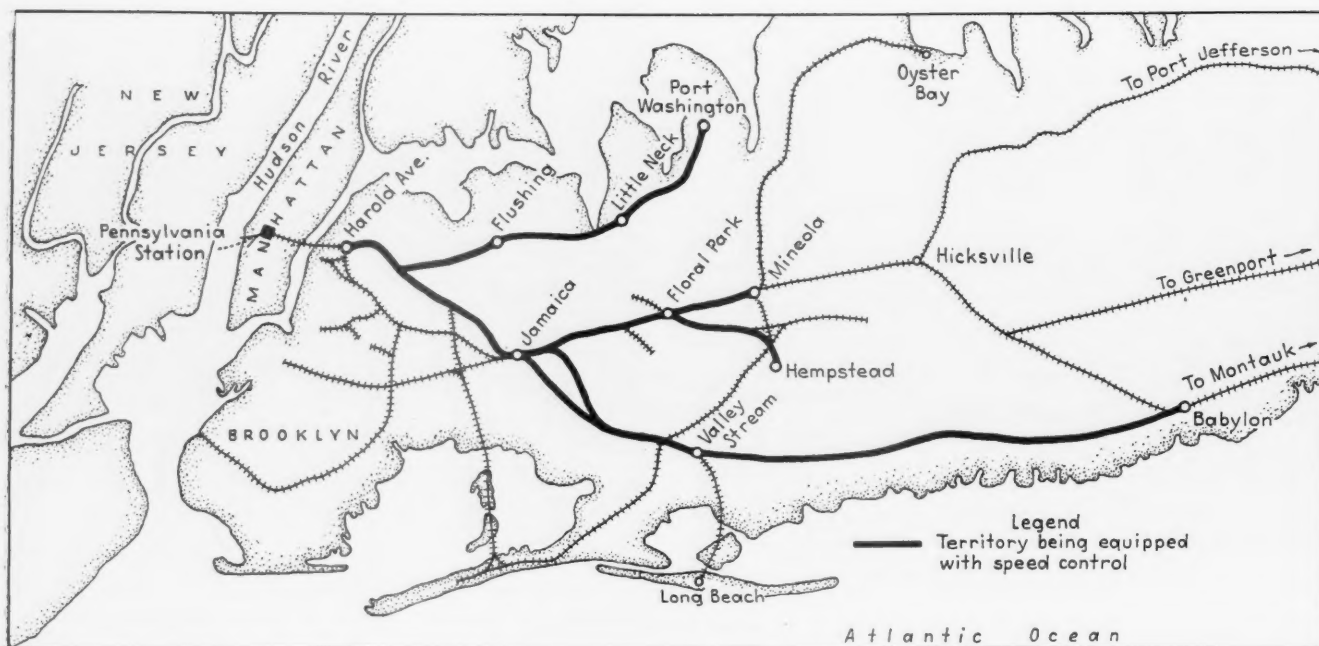
Long Island as a whole, and especially the western half, is an enormous suburban area where more than a million people have their homes. Approximately 300,000 commuters use the Long Island to commute daily to and from their work in New York. In the principal part of this commuter area, the railroad is equipped for electric propulsion, using multiple-unit passenger cars. During rush

hours, each train consists of a maximum of 12 cars. The eastern portion of the railroad, where steam locomotives were formerly used, is now largely dieselized.

Trains from branches feed into the main line at junctions, so that traffic is heavier on the sections of main line that approach New York City. These are the sections on which the new speed control is being installed, as indicated in the diagram on page 38. The table lists the road-miles and track-miles on each section, and the approximate number of train movements daily.

The new speed control system was superimposed on the existing wayside signal system, which includes three-aspect position-light signals, that, with a few exceptions, are in the same locations as previously. The propulsion current in the third-rail territory is 650 volts d.c. The track circuits for controlling wayside signals are 25-cycle a.c. In addition to wayside position-light signals, the Long Island previously had cab signaling between Harold Avenue and Port Washington, 16.3 miles, and between Jamaica and Babylon, 57.5 miles. This cab signaling is being modified for the new speed control system.

As shown in pictures herewith, the speed limit indicator on each m.-u. car is mounted in the engineman's cab at the left and in line with the three air gages. Each in-



Fif. 1—Map showing locations of territories being equipped with speed control.

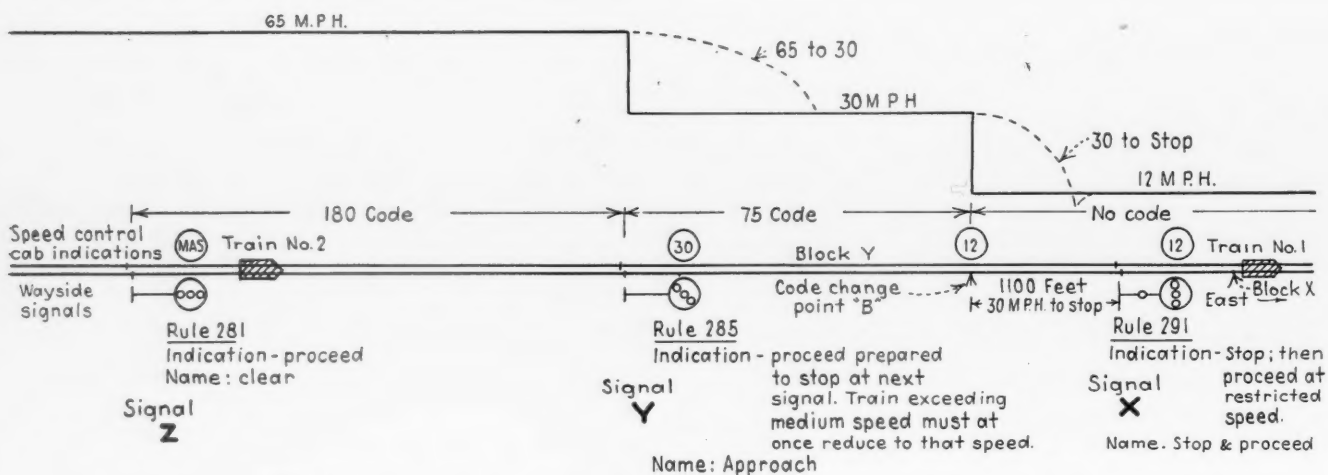


Fig. 2—Diagram showing how various signal indications require train to reduce speed progressively.

indicator has three lenses in a line. The one at the left displays green with the letters "MAS," indicating "Maximum Authorized Speed." The next one is yellow with figure "30," indicating "30 m.p.h." The third one is red with figure "12" indicating "12 m.p.h." The speed is measured by a speed governor which is mounted on the end of the journal box on the trailer truck of the car, the moving element being bolted to the end of the axle.

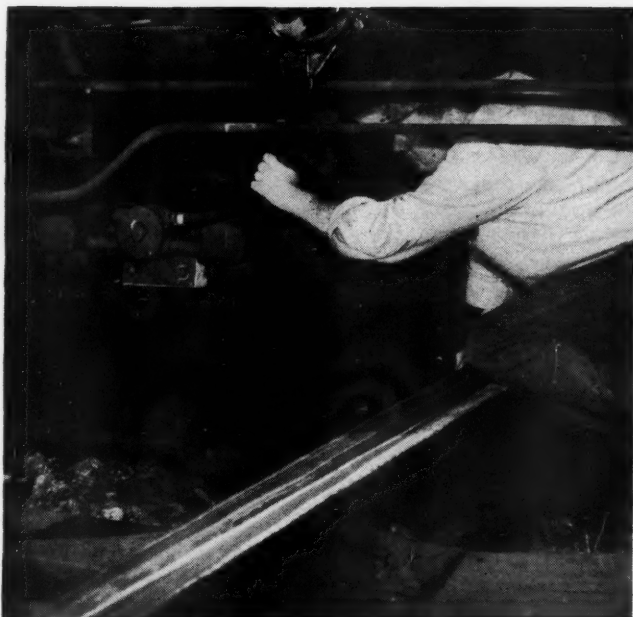
The new speed control system, including cab indicator,

is controlled by coded impulses of 100-cycle a. c. current, fed on the rails in the direction toward an oncoming train. Ahead of the front wheels of the leading car or locomotive is a pair of receiver coils which inductively pick up the coded impulses from the rails. The coded energy is then fed through electronic detector and amplifier tubes on the car, which, in turn, operate relays as a function of the code received.

Referring to Fig. 2, code at the 180-rate is feeding on the rails west from signal Y, in the direction opposite to train movement. This 180-code will cause the speed limit indicator of train No. 2 to display the "MAS," green aspect. While train No. 1 occupies automatic block X, signal X displays the horizontal aspect, with one light below, indicating Stop and then Proceed. No code is on the rails between the rear of train No. 1 and Signal X. Also no code is on the rails between Signal X and the code change point "B" in block Y. Seventy-five code is applied to the rails westward from this "B" point to signal Y.

Sections Where Speed Control Is Being Installed

	Road-Miles	Track-Miles	Approximate Number of Trains Daily
Harold-Port Washington	16.3	28.4	92
Harold-Jamaica	7.2	28.8	344
Jamaica-Floral Park	5.5	22.0	220
Floral Park-Mineola	3.6	7.2	132
Floral Park-Hempstead	4.9	8.7	92
Jamaica-Babylon	27.5	55.0	108
Jamaica-Valley Stream	6.4	12.8	142
Total	71.4	162.9	1,130



The receiver, located under the car ahead of the leading wheels, picks up the coded impulses in the rails.



The speed governor is on a journal box, and at rear of view is case for relays and electronic devices.

Two seconds after the receivers on the leading multiple-unit car of train No. 2 pass the insulated joints into a block in which 75 code is applied on the rails, the cab signal changes from "MAS" to "30," and the warning whistle blows. The engineman has five seconds, after the whistle starts blowing, in which to move the brake handle to the service position if the train is moving in excess of 30 m.p.h., and depress and release the acknowledging pedal. If the train is moving at 30 m.p.h. or less at this time, then it is only necessary to operate the acknowledging pedal within the five-second period after the whistle blows. Since the engineman would not have the brake handle in the service position at this time, failure to acknowledge would cause the brakes to apply at the service rate.

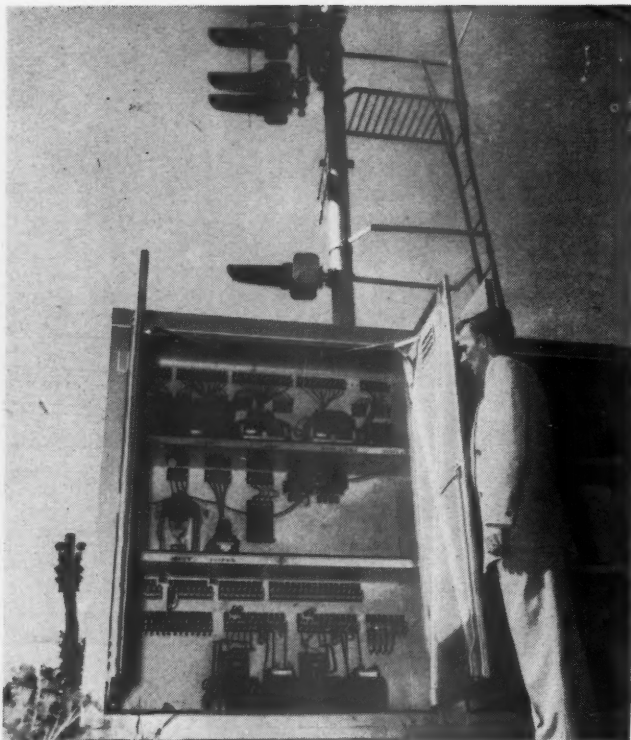
When the train is moving in a block having 75 code on the rails, the proper action is assumed to have been taken in bringing the speed to 30 m.p.h. when the block was entered. If the train accelerates to exceed the speed limit of 30 m.p.h. being enforced by the governor, the



New gages, engineman's brake valve and wiring were installed on the MU cars.

whistle sounds, and, after a five-second delay time, the automatic brake application will occur as was the case when the train passed from an "MAS" to a "30" block. This automatic brake application may also be suppressed, provided the engineman initiates a full service brake application before the expiration of the five-second delay time.

Still referring to Fig. 2, when train No. 2 passes the "B" point, it is thus moving from a section having 75-code to a section having no code. This causes the whistle to blow, and the cab indicator to change from "yellow 30" to "red 12." The engineman has five seconds, after the whistle starts blowing, in which to move the brake handle to the service position, and to depress and release the acknowledging pedal. When the service brake application reduces the speed to 12 m.p.h. or less, the engineman can release the brakes, and proceed at not over 12 m.p.h. In either example (180-code to 75-code) or (75-code to no code), if the engineman takes no action within five seconds, an automatic service application of the



New relays, track circuit code equipment and cases were installed at the signals.

brakes will occur, regardless of the speed, and will bring the train to a stop.

Assuming now that the engineman did take action during the five-seconds delay time, then, when the train speed has been reduced to that permitted by the cab indicator, air pressures are restored in the timing reservoir and application valve. On multiple-unit cars, pressure of 62 lb. on both the red and white hands of the duplex gage are required before the engineman restores his brake valve handle to the release or running position. The "B" points are installed in order automatically and continuously to enforce a speed restriction for trains *before* entering as well as while proceeding through an occupied block.

Speed Control Equipment on Cars

As trains cannot be turned in Pennsylvania Station in New York, direction must be reversed to depart; therefore, on every multiple-unit train, there must be a car on each end that is equipped for speed control. The program calls for the installation of speed-control apparatus on 355 multiple-unit cars, and also on 42 locomotives used on branch lines but which enter speed control territory for portions of their runs. An old roundhouse at Jamaica is being used as a shop in which to equip these cars. With a force of approximately 146 men, working on about 12 cars, the job is being completed at the average rate of one car each working day. The new equipment for each car costs about \$6,000, and other materials and labor about \$4,000, thus totaling about \$10,000 for each car or locomotive.

The first work is to remove the old air piping and conduit. One set of wheels is removed to drill a hole in the end of the axle for mounting the revolving drive for the speed governor. The car is then moved into the shop.

The apparatus being installed on each multiple-unit car includes:

1. A speed governor.
2. Case including electronic equipment and relays which are controlled by (a) code at 75; (b) code at 180; and (c) absence of code.
3. Case with two d. c. control relays, the purpose of which is automatically to cut in the cab signals and speed control for the direction in which the car is being operated.
4. A dynamotor, driven on 32-volt battery, to produce 300 volts d. c. to feed the plate voltage on the electronic tubes. This machine operates at approximately 3,400 r. p. m. at all times when the cab signaling and speed control is in service on the car.

Associated with engineman's compartment, at each end of the car, is the following equipment:

1. Cab indicator.
2. Acknowledging foot switch.
3. New engineman's brake valve with application valve.
4. Three air gages—(a) main reservoir and brake pipe, (b) timing reservoir and application pressure, and (c) suppression pressure.
5. Automatic air-operated switch in control circuit of power feed to traction motors. This cutoff is effective for forward motion but not for a back-up move.
6. An assembly including an automatic electro-pneumatic control valve with timing reservoir and timing valve with necessary reservoirs mounted under the car at each end.
7. New air piping and conduit.
8. Approximately 5,000 ft. of No. 14 stranded insulated wire, on each car.

The new air brake equipment is furnished by the Westinghouse Air Brake Company; the speed control devices by the Union Switch & Signal Division of the Westinghouse Air Brake Company; the wire by various wire companies and the solderless wire terminals by the Aircraft-Marine Products Company.

Wayside Signal Construction

With a few exceptions, the wayside position-light automatic signals remained in their previous locations. In order to superimpose the new track circuit code on the existing system it was necessary to replace the present instrument cases, and install modern sheet-metal cases to house the combined arrangement of relays, transformers, code transmitters, and decoding relays. Therefore, complete new cases and wiring were installed at every signal. Most of the old low-voltage track transformers and vane-type track relays were reused. Otherwise, all the apparatus in the cases is new. At the "B" points all the equipment, cases and wiring is new. The connection from instrument cases to rail are No. 6 solid single-conductor cable. The wiring in the instrument cases is No. 14, and was furnished by the Kerite Company. The solderless terminals were made by the Aircraft Marine Products Company.

The wayside signal construction is being done by railroad forces, using several crews totaling from 75 to 90 men. About a third of the territory has been finished, and the entire project is scheduled for completion about November 1, 1952. The wayside signaling engineering is under the direction of S. B. Higginbottom, assistant chief engineer, signals and speed control. The construction of the wayside equipment is under the supervision of C. Meyers, engineer of construction and speed control. The installation of the cab signal and speed control apparatus on the multiple-unit cars and locomotives is under the direction of P. S. Mock, superintendent of motive power.



How Users View Refrigerator Car Trends

United Fresh Fruit & Vegetable Association car committee urges outside-reading thermometers and underbody heaters—Desirability of sliding doors discussed

This report of the eighth annual meeting of the Refrigerator Car Committee of the United Fresh Fruit & Vegetable Association was presented by its chairman, John N. Kelley, manager of fruit transportation of the Fruit Dispatch Company, at the association's convention at Cleveland on January 30. Mr. Kelley reminded the association's members that the committee's work had been fully discussed by representatives of its own industry, of the railroads and of private car lines, of the Association of American Railroads, and of the United States Department of Agriculture. The committee expressed its gratification at the testimony of members during the convention of a noticeable improvement in the arrival condition of fruits and vegetables because of the thousands of new and improved refrigerator cars now in service. Trends affecting future refrigerator car service are discussed in the part of the report presented here.

From the beginning of 1945 through the first half of 1951, \$300,900,000 have been spent on new, rebuilt and heavily repaired refrigerator cars. This money was spent

for refrigerator cars, and not for any other rail equipment whatsoever.

In 1916 a refrigerator car considered satisfactory cost new only about \$2,500. In 1940, before the second World War, a good refrigerator car, built to the standards of that time, ranged in price from \$4,000 to \$4,500. Today the cost of a modern, standard 40-ft., all steel, heavily insulated, fan equipped car is \$10,000. The larger, 50-ft. cars, referred to as "giant" cars, equipped with overhead bunkers, cost in the neighborhood of \$12,000 to \$13,000. Cars equipped with mechanical refrigeration cost approximately \$6,000 more than the standard, modern car, or about \$16,000.

Of outstanding importance is the performance of the forced air circulating fans, which reduce temperatures quickly under refrigeration and make it possible to maintain uniform temperatures under all conditions. Forced air circulation in refrigerator cars is now an accepted feature, and railroad and car-line officers report that all new and rebuilt refrigerator cars either have been or will be so equipped. New and improved types of fans have been developed and put into service during the past year. Because the improved fan types are suitable for installation in the upper part of the bulkhead openings, many of the older cars that are now being rebuilt to modern standards are being fan equipped. Since the

older type fans are restricted to floor installation, many of the modern rebuilt cars would be without fans had it not been for development of the newer overhead type.

According to the October 1951 issue of the Railway Equipment Register there are in service at present 126,378 freight refrigerator cars of all types. Of this number 102,215 are of the general-service type which are commonly used in the shipment of fruits and produce. Of the general-service cars, in which the association is principally interested, 38,637, or 38 per cent, are already equipped and operating with fans. In addition to the cars that are presently equipped with fans, the railroads and private car lines have on order approximately 8,800 additional fan car-sets that will be installed in new and rebuilt equipment this year. When the 1952 building program has been completed, there will be a total of 47,437 fan equipped cars in operation, and the proportion of fan cars will be increased to almost 50 per cent.

While the standard 40-ft. water-ice fan equipped refrigerator car has been widely accepted for general service, some larger cars have been built for special uses. At the present time there are 1,677 giant cars in operation. Of these, 258 are assigned strictly to special service, and the others to general and special service. Only 100 of these giant cars were built in 1951, and these, combined with those constructed previously, amount to only one per cent of the total freight refrigerator cars in service.

Mechanical Refrigeration

Considerable experimental progress was made last year with mechanical refrigeration, especially for frozen foods and frozen concentrates. The Fruit Growers Express Company and the Atchison, Topeka & Santa Fe have led in the development of this type of refrigeration. The Fruit Growers Express has at the present time 165 cars equipped with mechanical refrigeration, while the Santa Fe has one in service now, and is in the process of building 30 more.

Whether or not mechanical refrigeration will eventually be extended to cars built for general service will depend upon how well this equipment works out in the special services. Of prime importance, of course, are the high initial cost of this equipment and the cost of maintenance. While the present cost of constructing a mechanically refrigerated car is expected to be from \$15,000 to \$16,000, no reliable information exists as to what it will cost the railroads and private car lines to maintain this type of equipment. Until all of these costs are known, mechanical refrigeration must necessarily be considered in the developmental stage. During this period the private car lines receive exactly the same revenue from this equipment as they receive for the ordinary refrigerator car, namely, 3 cents per mile.

Sliding Doors

Because of the great variation in refrigerator car door dimensions, the Refrigerator Car Committee has been working for standard dimensions that will aid engineers and architects in the laying out of warehouse unloading platforms. In committee discussions of this problem in 1947 sliding doors for refrigerator cars were suggested as a possible solution to this difficulty, provided a satisfactory design could be developed. Unfortunately, however, sliding doors have prematurely made their appearance on a very large scale not alone for the purpose originally intended, but also to adapt refrigerator cars to the handling of certain dry and relatively non-perishable package freight on return hauls. The for-

warders that handle this type of freight, which is mostly palletized, desire doors six feet wide and very heavy pallet racks so that fork lift trucks with palletized loads can be moved directly into the cars. While it is desirable to make the maximum use of rail equipment and to reduce empty car-miles, great care should be taken in the acceptance of appliances primarily intended for non-perishable loadings, particularly if these features of design are in any way detrimental to the handling of fresh fruits and vegetables.

Sliding doors have definite advantages over the old-style hinged type doors, in that warehouse tracks can be laid out so as to bring the cars closer to the loading platforms. It is for these reasons chiefly that we have been interested in the development of a sliding door, but in this development problems have been encountered, particularly for use in the fresh fruit and vegetable service, that still keep them from being fully acceptable.

In the first place, instead of retaining the original four-foot door, the builders have gone first to the five-foot, and now almost universally to the six-foot sliding door opening. Furthermore, some consideration is now being given to further widening these doors to eight feet on new equipment. Because a six-foot or wider door opening cannot be handled satisfactorily with hinged doors, the sliding door has been adopted, particularly for canned goods, frozen products, biscuits and other palletized loads. Fresh fruits and vegetables are not handled on pallets to any extent. The wide sliding door, as presently constructed, is very difficult to open and close, particularly for one man, working alone, and particularly on a roadbed embankment or a banked curve.

In many places these cars have to be opened without the aid of any railroad help and under the most difficult conditions—in darkness, snow, sleet and rain—by a man standing on the ground well below the track, just barely being able to reach the door handles.

The committee hopes that improvements will be made in the rails, rollers and other parts of the sliding doors eventually, so that they can be easily operated under all conditions.

Like many other innovations and improvements that have been made in refrigerator cars, objections are almost always raised at the outset, but by thorough discussion and understanding of the problem, eventually satisfactory results are usually obtained. Such improvements as floor racks, depressed ice pans, hinged plugs, half-stage icing and heavier insulation are good examples of features that were objected to at the outset, but eventually perfected and accepted. Even the modern fan car gained general acceptance only after considerable controversy and discussion of its merits. The committee believes the sliding door can be perfected, but hopes the present heavy, cumbersome six-foot door will be improved before it is adopted on a larger scale. At present there are over 5,000 cars in service equipped with sliding doors, and 3,375 on order, making a total of about 8,400 altogether.

Underfloor Heaters

It is somewhat puzzling to those who have worked together for improvements in railroad handling of perishables to see the ready—almost eager—acceptance by several of the car lines of this type door which is primarily intended for commodities other than fresh fruits and vegetables, and not see at the same time equal acceptance of other much-needed improvements for perishables, such as thermometers which permit reading of the inside temperature from the outside, and under-floor systems of heating. The need for these improve-

ments, for reading inside temperatures of the cars from the outside, and improved systems of heating, has been well established not only by experience, but also by tests conducted by the U. S. Department of Agriculture.

The department has just completed an official road test with 25 cars equipped with underslung charcoal heaters from New Orleans to Winnipeg. This test is being run in cooperation with the Fruit Dispatch Company, the Illinois Central and the Chicago, Burlington & Quincy. The purpose of the test is to supplement the successful tests conducted by the department in previous winters with this type of heater and to ascertain exact railroad operating costs when the heaters are used in trainload lots. The test also includes Preco thermostatic alcohol heaters.

The current acceptance of the sliding door emphasizes more than ever the need for ready means of ascertaining inside car temperatures from the outside. The six-foot sliding doors greatly increase the loss of temperature when they are opened for inspection or for unloading. If doors of this type are to become standard, improved heating systems other than the usual portable charcoal burners in bunkers are mandatory. Outside temperature reading devices and under-floor heating systems are now being installed on a great many modern motor trucks and trailers, and these improvements, combined with other advantages of trucking, should be considered by the railroads if equal rail protection is to be given the commodities this association deals in.

While shippers have succeeded in obtaining major improvements in refrigerator cars, they must face the fact that the new equipment is very expensive to build and that it must be operated efficiently. This means that there must be a minimum of idle days and that the equipment must be utilized for return haul loads wherever possible. It is for this reason that shippers can expect additional changes, some of which may not be needed for fresh fruits and vegetables, but which are required for non-perishable back-haul commodities. The sliding door previously mentioned is one of these and there may be others, so it will be necessary for everyone to be constantly alert to suggested changes that may be detrimental to fruits and vegetables.

Insulated Box Cars?

There is hope that there will come into being a type of insulated box car that will satisfy the demands of many shippers of non-perishable products and thus relieve the regular refrigerator car supply. Refrigerator cars are at present in demand for a wide variety of articles such as canned food, beverages, biscuits, flour, delicate machinery, radios and electronic devices. Some of these commodities require refrigerator cars merely because they are insulated and will prevent freezing of the products in transit in cold weather. Others demand them because insulated cars prevent condensation of moisture on delicate metal parts and thus reduce the danger of damage through corrosion. Such shipments require protection, but the type of protection they require can be furnished by a properly built, insulated box car. There is interest in such a car because it is less expensive to build than a modern refrigerator, and every one built would release one of the new refrigerators for the handling of commodities it was originally intended for, namely, fresh fruits and vegetables.

The full cooperation of every shipper and receiver of perishables is needed in order to gain the maximum benefits from the refrigerator car fleet. While the carriers and private car lines insist that it is their aim to provide sufficient modern refrigerator cars to meet the needs of

fruit and vegetable shippers, they urge shippers to share in reducing the number of lost car days.

Shippers can assist by complying with the following:

1. Cars should be cleaned by receivers promptly and thoroughly.
2. Prompt loading and unloading of cars by shippers and receivers should be a "must."
3. Refrigerator cars should not be used for storage.
4. Shippers should not place orders for cars in excess of their actual requirements.
5. Cars should be released clean of all top-ice.

Letter from a Reader . . .

How Does Air Move Around Streamline Trains?

DENVER, COLO.

TO THE EDITOR:

The analysis of air motion around streamline trains as set forth in your December 24, 1951, issue, page 41, is interesting but incomplete. Contrary to the analysis, there is a point near the front of the train where a strong current of air flows toward the side of the train, which would tend to move any object in its path toward the train. Outward rush of air pushed sideways or upward by the front of the train creates a low-pressure area along the train which is at a maximum about 10 ft. back from the front face. Consequently, there is a return flow of air into this low-pressure area, after which the flow straightens out into a general turbulence along the train. This return flow is of non-uniform laminar character and I have observed its effects in two ways.

Some years ago I had occasion to ride a single-unit rail passenger car on an Iowa branch line in the summertime. Weeds three or four feet high grew alongside the track, and their tips bending in the air stream formed a definite and continuous pattern near the front of the car. First, there was the pattern formed by the outward flow as air was pushed aside and, immediately behind, the pattern of the tips being drawn in to the side of the car. This effect was readily seen at any speed over 15 m.p.h. and the location of the low-pressure area did not change as speed increased. The only effect of higher speeds was to flatten out the weeds at a little greater distance from the side of the car.

The other method of observing this phenomenon was with the streaming double-refraction method of fluid flow analysis. Here, bentonite clay suspension observed flowing through or around a model gives an interference color pattern when viewed with circularly polarized light. For a complete description of this process, see my paper in *Mechanical Engineering* for September, 1945, pages 586 to 590. The color pattern formed is a function of the type of flow and, neglecting the effects of compressibility, water can be used to simulate air flow, since both are fluids and follow the same laws.

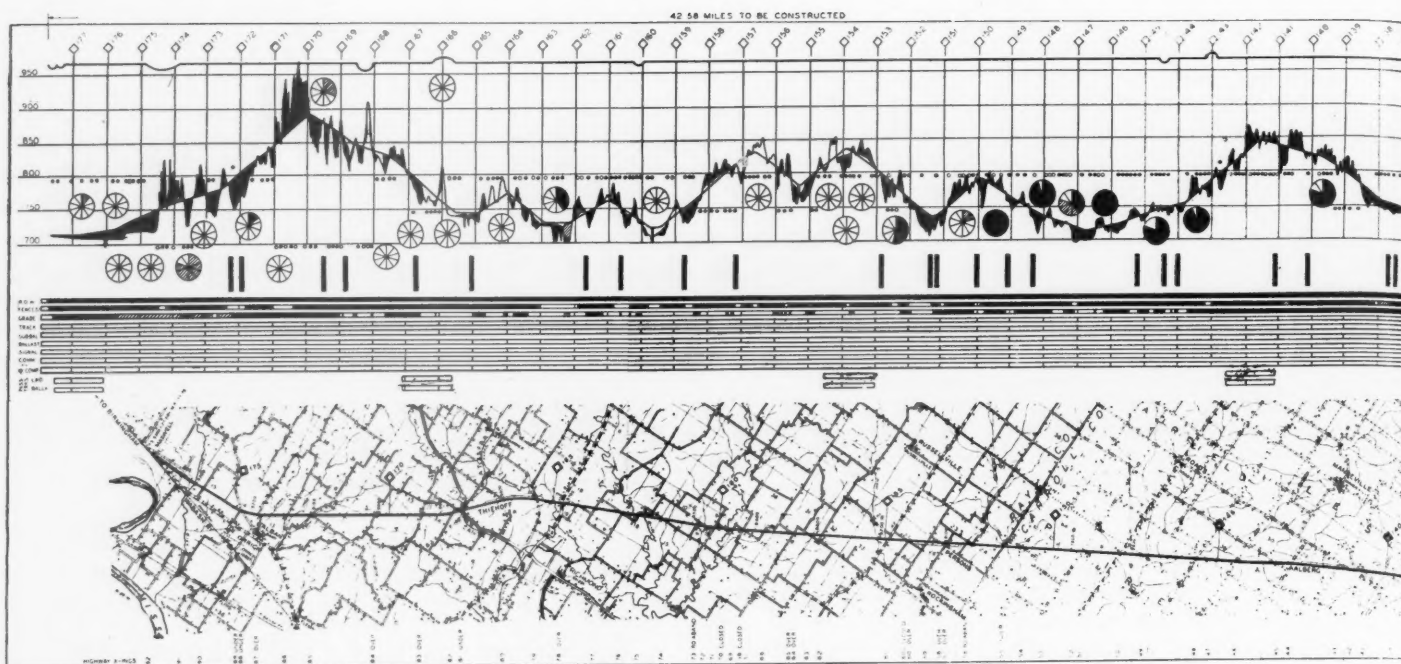
Observing a model of a diesel-electric locomotive immersed in this clay suspension, I have seen this same creation of a low-pressure area near the front. Likewise, flow around a cylinder produces a pattern slightly different from that shown in the text books as "classic examples." At about the 45 deg. points from the leading edge, low-pressure areas with attempted return flows are created.

To an observer standing only a few feet from the path of an onrushing train, if he is crazy enough to do so, the effect would be "push-pull, click click," and would be of such short duration that he would probably miss it entirely.

The point I wish to bring up is that theory of aerodynamics still lags a little behind the facts.

WALTER LEAF

Research Technician, Denver & Rio Grande Western



It would be difficult to find a more complete progress report than the one reproduced here, which the Burlington is using to report progress of the work of constructing its 71-mile

Centennial Cutoff in Missouri. The upper portion of this chart consists of a profile of the new grade line and ground line along the projected route so that the cuts and fills can be

"How's Our New Line Coming Along?"

When this question is asked in connection with the Centennial Cutoff that the Burlington is building in Missouri, it is answered each month by two charts that give full information

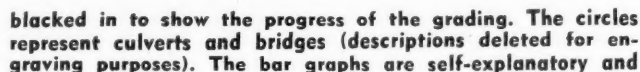
It is evident that the Chicago, Burlington & Quincy ascribes great weight to the old proverb, "one picture is worth a thousand words." The evidence is in the charts the road uses to keep its interested officers informed of the progress being made in construction of the Centennial Cutoff that is being built between Needles, Mo., and Maxwell, a junction point with the Wabash 16 miles east of Birmingham, to shorten the Burlington's route between Chicago and Kansas City. Imagine the length of written progress reports that would be required to describe the work completed each month on a \$16-million project, its percentage to the total involved, the amount of work completed to date, etc.! And who would take the time to read them?

Old Type Charts Out of Question

On the progress charts developed by the Burlington each phase of the construction work—whether it be right-of-way purchased, clearing completed, track laid, etc.—is not only visually indicated but also the exact mile or miles in which the work was done is shown. Likewise, the project as a whole is shown broken down into the several operational phases and a summation is

given of the work completed to date and its percentage to the total.

Like most railroads, the Burlington, until it undertook construction of the Centennial Cutoff, had not carried out a large line-construction project for a number of years, the last one being a 20-mile line built in 1923. To refresh memories, the file on that project was exhumed to see how the progress of the work was reported currently. It was found that two charts were used, one being a profile, scale 1 in. to 400 ft., of the grade line and ground line, with the cuts and fills colored to show the grading work accomplished. The other chart was a bar graph, divided into construction sections and showing percentages of the work completed each month, including clearing, grading, bridges, culverts, pipes, fencing, overhead and subways, rail laid, and ballasting. But each month's work was shown in a different color or color symbol, a method that was impractical to use on the newer and larger project which was estimated to require about 30 months to complete. Also, it was decided that more officers were to be kept informed on the new project, thus requiring substantially more copies of the monthly progress report to be prepared than the three copies distributed for the former project.



To have drawn the progress chart of the new 71-mile project to the same scale as the profile used on the earlier 20-mile project would have required a chart over 78 feet long—obviously an impractical undertaking. So, a scale of 1 in. to a mile was selected, this scale being the same as that used on available highway and transportation maps of the area involved, which were made originally by W.P.A. forces in 1939 and kept up to date by the counties. It was planned to use appropriate portions of such maps on the lower part of the new progress chart for showing the alinement of the new line.

The new progress chart has three parts. The lower part is a map to give a visual idea of the route of the new line and the terrain through which it is projected. The upper part is a profile of the natural ground and the new grade lines. Between the profile and map is a bar graph. Negative prints were made of each part, then matched to have relative points of all three parts in as nearly a vertical line as possible, after which another negative was made of the grouped components to form the composite progress chart.

The map was formed by fitting the several general highway and transportation maps together and then plotting the alinement of the new line on them. These maps showed railroads, rivers, streams, creeks, towns, farm buildings, schools, cemeteries, land section numbers and townships. Since the new line is relatively straight, a strip only 6½ in. wide was sufficient for depicting the entire line without a break in its continuity.

The profile forming the upper part of the chart is drawn to the same scale as the map horizontally and 50 ft. to the inch vertically. It had been drawn from the preliminary survey and showed survey stationing, mile posts, curvature, and the locations of all pipes, culverts and bridges.

[illegible]

Reproduction of a small part of the upper portion of the progress chart, showing detailed information on all culverts and bridges as these descriptions appear on the profile.



Heavy earthmoving machines and equipment were used on construction of the Centennial Cutoff.

tion work. They include concrete boxes, right-of-way acquired, fencing, grading, track laid, sub-ballast placed, ballast placed, signals installed, communication lines completed, main-track work completed, passing tracks laid, and passing tracks ballasted. The bar graphs are shown horizontally to match the map and profile except for the concrete boxes which are shown by vertical bars drawn at their respective locations in each mile.

The map at the lower part of the chart is static and no work progress is reported thereon. However, any work completed during the previous month is shown by crosshatch lines on the profile and bar graph, while the work completed prior to the previous month is made solid black. Any amount of grading work done is shown on the profile. If the work was done during the last month it is shown by crosshatch lines; if done prior to the last month it is shown by solid black. Grading work done is not shown on the bar graph until it has been completed to the subgrade. It is then shown by crosshatch lines or solid black, depending on whether it was completed during the last month or previously.

Pipe culverts are shown by small circles on the profile at their corresponding locations within a mile. Concrete boxes, as stated, are shown by vertical bar graphs below the profile. Opposite each circle on the bar graph, the assigned number of the culvert, as well as its description, is shown. When a pipe culvert has been completed, the circle is made solid black. The bar graphs are marked according to the percentage of completion of each of the box culverts.

Construction progress for each of the bridges is shown by a relatively large "pie" symbol on the profile, which is divided into 10 equal sectors for showing percentages of the work completed. A dotted arrow is used to tie

each "pie" with the description of the structure it represents; in this way the description can be placed in its relative location within a mile while the "pie" can be moved to a convenient space on the profile so that it will not conflict with another "pie" or other information shown on the profile.

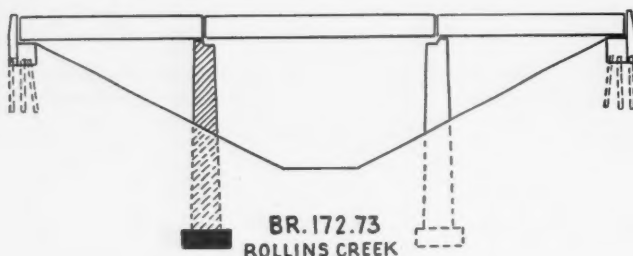
However, since bridges take time to construct and can very well contribute to lack of progress of other work, a report on these structures is desirable in more detail than just the percentages shown by the "pie" symbols. Because there are 43 such bridge structures to be constructed, not including an overhead highway bridge to be built by the state of Missouri, a description of the work progress of each would necessarily entail a long written report. So another chart, showing each of the 43 structures to scale, was developed to permit showing the degree of completion of each structure.

Totals Also Reported

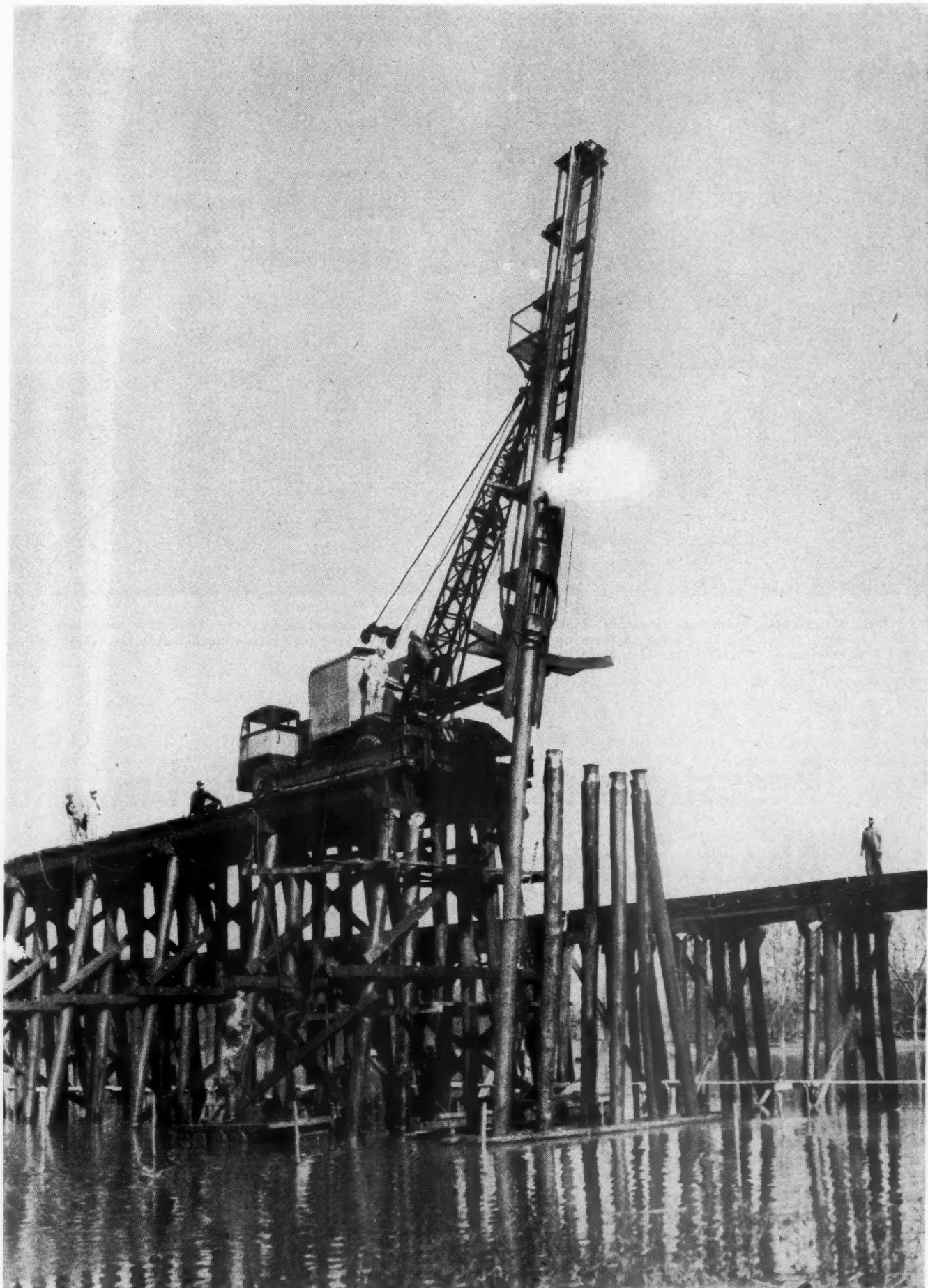
While these charts show the progress of the various construction operations in each mile and for each major structure, there was one additional item of information that was desired, namely, a statement showing the quantities of each type of work involved in the project as a whole, and the quantities completed to date. This was provided by a table placed in the lower corner at the right end of the large chart. This table shows in columnar form the various kinds of work, the units of measurement, the total estimated quantities, the total quantities completed to date, and the percentages of the completed work to the total. Also, a column is provided in which remarks may be shown regarding each item of work.

The originals of the two charts are kept in the office of the assistant chief engineer and are revised each month from corrected charts submitted by the construction engineer on the ground. Prints of the two charts as revised each month are sent to 23 of the road's officers with a letter of submittal. *En toto* they answer the query, "How's our new line coming along?" Because the progress of the work is shown so comprehensively by the charts, there is little need for additional informative facts to be included in the letter of submittal. The information that is shown in this letter pertains mostly to the weather and its effect on the work.

The charts were originated under the general direction of H. R. Clarke, chief engineer, H. A. Aalberg, assistant chief engineer, and G. R. Burkhardt, engineer of standards.



One of the 43 bridge structures as shown on the second progress chart. The crosshatch lines denote work completed during the last month, while the solid black denotes work previously completed.



One of the creosoted pile and timber trestles being built by contractors on the Centennial Cutoff, progress of which is reported monthly on the charts.



Indicators of railroad operating efficiency continued to advance throughout the year and some of them are now at record high levels, but, the Interstate Commerce Commission

added in its annual report, "the competitive conditions which the railroads face require continued search for every possible economy."

Reductions in Appropriations Bringing About "Deregulation," I. C. C. Says

Tells Congress, in annual report, that it has only "about 60 per cent of the staff necessary for the efficient and effective performance" of its regulatory duties

Reductions in appropriations for the Interstate Commerce Commission are bringing about "deregulation" of transport agencies under its jurisdiction, the commission told Congress in its sixty-fifth annual report. The cumulative effect of the reduced appropriations is such that, for the current fiscal year, "about 60 per cent of the staff necessary for the efficient and effective performance of the commission's duties is available," the report said.

It went to Congress on February 6, in the usual form, being a 152-page document covering commission activities from November 1, 1950, to October 31, 1951. As noted in *Railway Age* of February 11, page 12, it con-

tained 11 legislative recommendations which were labeled as such.

What amounted to another legislative recommendation, though not so labeled, was this statement: "It is believed that an amendment of the act, perhaps of Section 6, to prohibit the payment of all allowances to shippers for performance of their spotting service under tariffs, except by and with our approval in each case, is now desirable."

That statement, which closed the commission's discussion of spotting services at industrial plants, was made "in view of our prior experience with certain rail carriers." The latter was a reference to the failure of

some roads to make their car-spotting allowances reflect what the commission considers a proper application of principles developed in commission reports on the terminal-services phase of the Ex Parte 104 investigation of railroad practices.

Wage and Rule Disputes

Discussing the stalemated wage and rule disputes involving demands of railroad operating employees, the commission, "without comment as to the merits" of the controversies, expressed its view that the failure to reach settlements "is not in the best interest of either party and is against the country's interest." The federal seizure of the railroads and the court actions to end strikes "are indications of the need for thorough consideration of what can be done to improve labor-management relations in transportation," the report added.

Its feature article, however, was the discussion of the "effect of reduced appropriations," as noted above. The commission devoted 21 pages to that subject, presenting what amounted to a bill of particulars as to what it needed in the way additional staff for the "full discharge" of its functions. The presentation indicated that 1,386 more employees would be required.

As to appropriations, it showed that funds made available to the commission have failed to keep pace with the cost of salary increases required by Congress. The appropriations for the current fiscal year totaled \$8,784,935, but an estimated \$2,126,845 of that amount was absorbed by the "congressional salary increases" required since 1947. Thus the before-salary-increases figure for fiscal 1952 was \$6,658,090, which compares with appropriations totaling \$7,867,000 for the prewar fiscal year ended June 30, 1940.

"Deregulation"

"The deregulation of transportation in interstate commerce," the report said, "may be accomplished either directly, by repeal in whole or in part of various statutory powers which the Congress has invested in the commission, or indirectly, through reducing appropriations to a point where the commission is unable to meet the statutory obligations imposed upon it. Regardless of whether this deregulation is brought about through the former or through the latter course of action, the consequences are in the last analysis the same. Deregulation is still deregulation."

"Although the Congress has since 1940 repeatedly expanded the commission's regulatory functions, deregulation is increasing through the gradual but steady reduction of the appropriations. . . . The resulting slow but steady attrition of the staff, aggregating in too many instances actual decimation, which more recently has increased with alarming speed, is reflected in deterioration of morale and increasing difficulty of recruitment. The net result to date is an impairment of efficient administration, a growing inability to perform the functions and duties required by the statute, and a weakening of the commission's regulatory authority which has already assumed serious proportions. All this leaves the general public more and more helpless and defenseless."

The report proceeded to stress the commission's role in the defense set-up. "Although we have not been identified as a defense or war agency per se," it said, "our activities have been so closely allied with the agencies directly alined in the defense mobilization efforts as to make their correlated functions unseverable."



Commissioners Charles D. Mahaffie (left) and J. Haden Alldredge (right) have been reappointed by President Truman for new seven-year terms, expiring December 31, 1958.

The commission made its "frank statement" because it thought the public interest "demands" it. It said that its "judgment and experience" qualified it to express an opinion as to the amount of work necessary to the attainment of congressional objectives. "It remains for others to decide to what extent the full discharge of our responsibilities should be compromised by considerations of economy in government," the report added.

Later on it said this: "If it be desirable to restrict the present system of regulating interstate commerce, the appropriate amendments to the statute would permit us to concentrate our present reduced staff upon the efficient and effective administration of the more limited statutory obligations assigned us by the Congress."

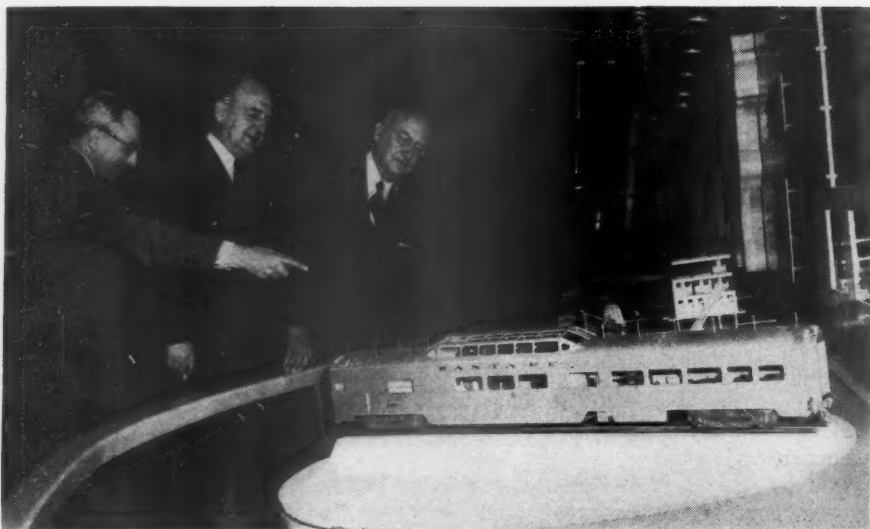
The foregoing discussion was in a special section at the end of the report; the first place had been given, as usual, to the commission's review of "transportation during the year." There it was stated that the "unusual complexity" of conditions, which was noted in the previous report, had "heightened" during the year under review. References were made to car shortages, "short-lived" railroad strikes, and the tight material situation. And the report then went on to discuss "inflation and rates."

Such discussion included comment on railroad rate increases—with figures which made it "quite apparent" to the commission that "diversions of rail traffic to other modes of transportation, particularly to motor carriage in both its for hire and private branches, have continued." Meanwhile, as the commission also noted, the "great competitive thrusts among transportation agencies" have brought many rate-cut proposals.

As to those, the commission said it has tried to prevent "rate wars," but "we have not required higher rates to be charged by one means of transportation in order to provide protection for another form not justified by transportation conditions." At the same time, the commission recalled what it said in its previous annual report about reductions to meet competition having been "made possible in part by the high level of charges on other rail traffic."

Law Limits Rail Trucking

As to contentions that the railroads might improve their service, and thus their competitive position, if the commission's policy with respect to railroad operations



ADMIRING A SCALE MODEL DOME-LOUNGE CAR in the new industrial show room in the Pullman-Standard building, Chicago, are (left to right): W. N. Barker, executive vice-president, Pullman-Standard Car Manufacturing Company; Champ Carry, president of the parent Pullman, Inc., and Charles W. Bryan, Jr., president of Pullman-Standard. Opened to the public January 21, the room features exhibits and display stations depicting the part played in transportation and industry by products of Pullman's various subsidiaries.

of trucks were less restrictive, the report noted how the courts have upheld the commission decisions involved. It added that "legislation is required if there is need in the public interest for more liberal treatment of the railroads in this respect." Meanwhile, "there is evidence that shippers in many instances prefer a rail-conducted motor operation if other conditions are reasonably equal."

Turning to its discussion of "operating efficiency" on the railroads, the commission reported that the indicators showed "continued advances throughout the year, and some of those indicators are at record levels." It also referred to the continuance of shipper cooperation, and went on to call for still greater efficiency. "The competitive conditions which the railroads face require continued search for every possible economy," the report added. In its next section, on "transportation and defense," it said that the outlook for new freight cars "is not as good as it should be."

"Meanwhile, shortages of freight cars were found to have increased demands for truck services. Among other developments in the trucking industry, the commission reported that a "substantial increase" has occurred in the interchange of trailers between carriers; that there has been "added interest in diesel-powered equipment"; and that the "growing use by the Post Office Department of trucks in the transportation of mail has been a striking development of the year."

The usual review of traffic and earnings of transportation agencies showed that carriers under commission jurisdiction reported, for the 12 months ended June 30, 1951, gross revenues of \$16,583,074,000, of which the railroads accounted for \$10,662,004,000. Revenues of private car lines and freight forwarders are not included in the total, but the report said that private car lines had revenues of \$182,271,426 for the same 12 months, while the gross of the freight forwarders was \$77,464,685.

Employee and Investor "Shares"

The commission's analysis of railroad earnings included the usual table which considers employees and investors as jointly producing an income to be shared by them. The figures, covering the 12 months ended June 30, 1951, showed that Class I railroads in that period collected gross revenues and other income total-

ing \$10,556 million. Outlays for materials and supplies, depreciation charges, other expenses (except wages and salaries), and taxes, including payroll taxes, absorbed \$4,396 million, leaving \$6,160 million as the "remainder for employees and investors." Wages and salaries—the "employees' share"—took \$4,808 million, leaving for investors \$1,352 million, or 21.9 per cent of the employees-and-investors total.

The commission's comment on this showing pointed out that the "employees' share" would be increased if payroll taxes were included in that item instead of with other taxes.

In a discussion of the passenger-train deficit, the commission referred to the competition for passenger business, and also said that a "large percentage" of the deficit has arisen from head-end traffic—mail, express, baggage, and milk. While it mentioned "new factors," such as greater volume and higher rates, the report nevertheless anticipated that the 1951 deficit would be a "substantial" one, calling for "efforts on the part of all concerned to find means of amelioration." Later on, the report said that "one effect of the huge passenger deficit is to afford a very large reduction in federal income taxes."

Another section of the report was devoted to a discussion of developments in the field of long-haul motor transportation. There the commission noted that the average length of haul on the lines of individual Class I intercity truckers increased from 177 miles in 1945 to 218 miles in 1949, "while the comparable railroad average decreased from 241 miles to 229 miles."

"This," the report added, "does not measure the average distance per shipment, as there is a substantial amount of joint-line freight. One transcontinental carrier having annual revenue of \$16,000,000 and an average haul on its own lines of 1,573 miles, reports that 52 per cent of its freight moves beyond its lines, and another carrier of comparable size reports that 61 per cent is interchange freight."

Between 600 and 800 motor carriers are now regularly engaged in the practice of interchanging trailers, the report also said. Moreover, "the evidence introduced at hearings" indicates that long-haul transportation by truck "is increasing and is profitable."

The remainder of the report included the usual separate reviews of the year's work of the commission's various bureaus.



A 70-ton G.E. diesel-electric switcher now pulls freight on the 24-mile Atlantic & Western between Sanford, N. C. and Lillington.

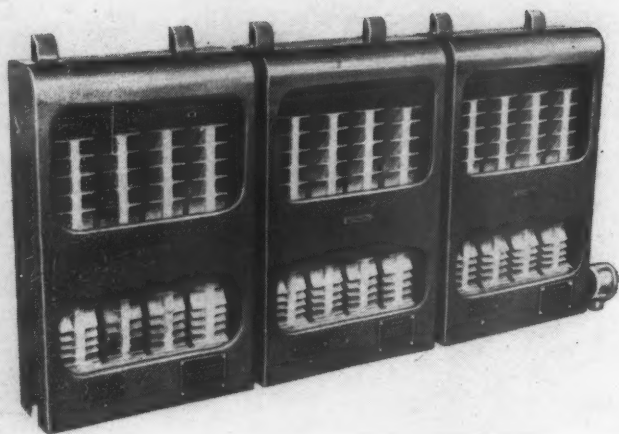
How a Diesel-Electric Pays the Atlantic & Western

The Atlantic & Western has increased its revenue while saving more than \$700 a month on fuel since replacing two steam locomotives with one General Electric diesel-electric 70-ton switcher.

The new locomotive was put into service more than a year ago. The A. & W. is a 24-mile line connecting with the Atlantic Coast Line, Seaboard Air Line and Southern at Sanford, N. C., and with the Norfolk Southern at Lillington.

E. T. Ussery, the road's general manager, points out that with steam locomotives, the Atlantic & Western in the first nine months of 1950 realized a net profit of \$5,387 after taxes and all fixed charges. For the fourth quarter alone, with the diesel-electric running, the railroad operated with a net of \$5,537. Operating costs decreased \$4,932 in the first three months of diesel-electric operation.

The railroad realized a saving in fuel costs of \$750 a month in 1950 after putting the diesel into service. Fuel saving from January through April 1951 averaged \$706 per month.



Explosion-proof heater

Explosion-Proof Heater

Designed for use in atmospheres containing gasoline, petroleum, naphtha, acetone, benzol, lacquer, solvent vapors and natural gas, the 6,000 watt Electromode heater, made by the Electromode Corporation, Rochester 5, N. Y., is approved by the Underwriters' Laboratories for use in Class I, Group D hazardous locations.

Typical users are industries where flammable gases, mixtures, or highly flammable substances are manufactured, handled or stored in other than their original containers. It has found application in pump, valve, and meter houses, and personnel warming shelters.

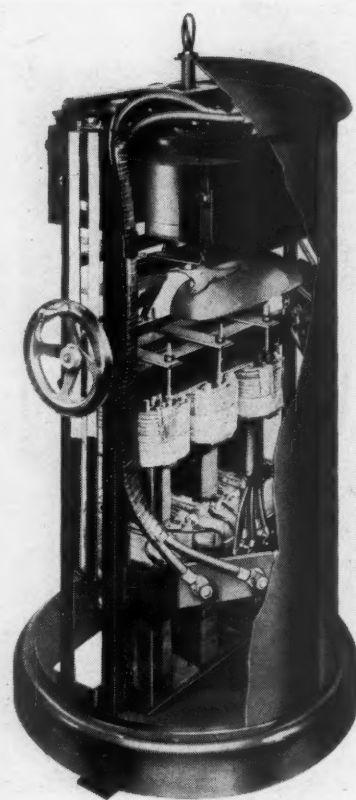
The safety-grid heating element consists of a nickel chromium resistor wire, insulated and sheathed in a seamless metal tubing and embedded in a one-piece finned aluminum casting. The aluminum grid remains at a low operating temperature, but has high thermal conductivity. It will not rust or corrode and there are no liquids to freeze-up or run dry.

Waterproof Upgrading Liner

A new waterproofing lining has been developed which prevents sharp objects from tearing sacked products, is insulated against contamination and makes box cars grain-tight.

This paper, made by the J. J. Lipp Paper Company, Chicago 7, consists of two sheets of kraft paper cemented together with asphaltum. It is reinforced with rayon yarns or tapes and creped after lamination to give it stretching characteristics to cover obstructions and holes and to take scuffing. The liner and tape can be used together to line an entire car, making available freight cars that would normally be unfit for use. The process may also be used to line floors or patch areas as needed. It is said that two men can finish an entire car floor in approximately 15 min. The liner is available in 164 ft. rolls, 62 in. wide.

New and Improved Products Of the Manufacturers



The d.c. welder retains the principal construction features of the maker's a.c. model.

Rectifier Type D.C. Welder

A heavy duty direct current welding machine, which has been put on the market by the A. O. Smith Corporation, Milwaukee, is designed for all industrial uses where d.c. welding is required.

The manufacturer states that extensive field testing has shown the new unit to be free of stack failure. This is accomplished by directing a high velocity downdraft of cool air over the rectifier stacks before passing this air through other parts of the machine. The blast is expelled at the base of the welder. This assures proper cooling and promotes machine cleanliness.

All of the principal construction features of this firm's heavy-duty a.c.

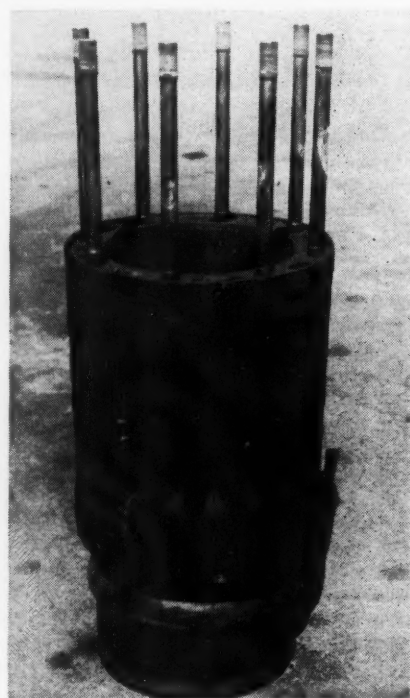
welder are retained in the d.c. unit. Among these are the case-diameter fan and wind tunnel design to assure adequate, efficient air flow over all energized parts. The primary coils are raised and lowered on ball bearing jacks. The machine is available in 200-, 300- and 400-amp. ratings.

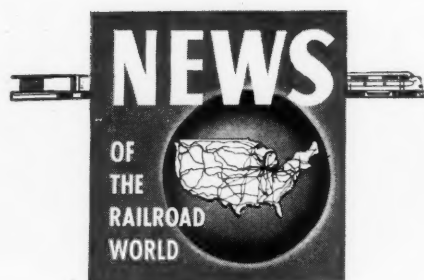
Lubrication for Diesel Liners

A bonded to metal lubrication process termed Lube-Lok, made and licensed by its manufacturer, the Electrofilm Corporation, North Hollywood, Cal., is being applied to diesel liners for two Class I railroads.

Recent tests on one of these roads are reported to have shown that the life of the processed liners was increased approximately 85,000 miles beyond normal service.

For the convenience of industry and users, nation-wide processing plants have been established in the following cities: Newark, Detroit, Ravenna and Dayton, Ohio, Chicago, St. Louis, Minneapolis, Colorado Springs, San Diego, Seattle and Los Angeles.





National Malleable Lab To Be Constructed Soon

Construction of the National Malleable & Steel Castings Co.'s new engineering laboratory and proving ground at Cleveland (*Railway Age*, September 3, 1951, page 80), will begin soon. Cleve H. Pomeroy, president of the firm, has announced.

"With latest methods for research and product testing available within the laboratory," he added, "we will also provide especially designed railroad test cars for use on our proving ground and on the lines of various railroads. While we are conducting investigations of our own products, we believe there will be some roads, as well as car and locomotive builders, who may want to make use of the new facilities for their own programs."

D.T.A. Authority Extended To Territories of U. S.

President Truman has extended the authority of the Defense Transport Administration to the territories and possessions of the United States. The extension was effected by Executive Order 10324 of September 9, 1950.

D. T. A. Administrator James K. Knudson announced on February 12 that he had designated Wayne G. Brown as his special assistant for territories and possessions of the United States. Mr. Brown has been on the D. T. A. staff for some time, serving as assistant administrative officer.

The Knudson announcement also said that "D. T. A.'s first action under this extension of authority . . . will be in Puerto Rico, where an investigation team will be sent to determine what measures are necessary to maintain adequate transportation." It added that "preliminary surveys of the defense transportation needs of the other territories and possessions will be conducted from Washington through the appropriate local governments."

Freight Car Loadings

Loadings of revenue freight in the week ended February 9 totaled 733,724 cars, the Association of American Railroads announced on February 14. This was an increase of 2,718 cars, or 0.4

per cent, compared with the previous week; an increase of 160,515, or 28 per cent, compared with the corresponding week last year; and an increase of 164,908 or 29 per cent, compared with the equivalent 1950 week.

Loadings of revenue freight for the week ended February 2 totaled 731,006 cars; the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS			
For the week ended Saturday, February 2			
District	1952	1951	1950
Eastern	129,295	122,814	115,338
Allegheny	148,160	142,959	121,630
Poconong	58,956	54,372	43,725
Southern	132,191	112,521	115,168
Northwestern	79,431	63,545	65,881
Central Western	119,759	106,856	97,724
Southwestern	63,214	48,098	52,978
Total Western Districts	262,404	218,499	216,603
Total All Roads	731,006	651,165	612,464
Commodities:			
Grain and grain products	53,518	44,033	40,388
Livestock	9,173	5,765	7,349
Coal	151,366	138,523	105,346
Coke	16,250	15,169	11,413
Forest products	42,477	36,578	32,291
Ore	17,535	14,122	11,722
Merchandise i.c.l.	72,430	68,793	81,950
Miscellaneous	368,257	328,182	322,005
February 2	731,006	651,165	612,464
January 26	727,933	784,166	635,934
January 19	747,662	779,750	619,163
January 12	742,757	783,015	629,543
January 5	609,967	662,427	505,753
Cumulative total five weeks	3,559,325	3,660,523	3,002,857

In Canada.—Car loading for the 10-day period ended January 31 totaled 115,497, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
January 31, 1952	115,497	52,313
Cumulative Totals for Canada:		
January 31, 1952	332,720	154,223

Because of a change in the method of reporting Canadian car loadings, figures for comparable periods of 1951 are not available. As reported in *Railway Age*, January 21, page 18, Canadian car loadings are now reported four times a month instead of weekly.

N.J.-N.Y. Rapid Transit Authority Proposed

Creation of a New Jersey-New York Metropolitan Rapid Transit Authority, to be specifically charged with solving the problem of providing physical connections between New Jersey railroads and Manhattan island, has been proposed by the New Jersey Regional Planning Commission.

"People must be brought back to the railroads," the commission's report declared, "if we hope to solve the mass transportation problem" for the benefit of the estimated 186,000 commuters who now use trains, buses and private automobiles for daily travel to New York from New Jersey. To that end, it suggested that the New Jersey and New York legislatures cooperate in establishing the new interstate authority "to make a survey, report to the legislatures on how the project can be undertaken, recommend what agency should build and operate the facilities,

and say how deficits (if any are to be encountered) should be met." The Port of New York Authority — which "should have undertaken the study long ago," the commission said — should provide funds for the survey, but with the states providing \$50,000 each to cover contingent expenses of the proposed authority.

Observing that the suburban transportation problem is the same today as 30 years ago, "only worse," the commission's report indicated that "the only way it can be solved is to bring railroad trains directly into mid-Manhattan in underground facilities and to keep this traffic underground in New York, either via existing subways, or via new arteries." It hinted that a new New York terminal might be used for freight "in off hours," and suggested that elimination of operating losses on present ferry and lighterage services would help to defray the costs of any new facilities.

The commission was created in 1950 by the New Jersey legislature; its chairman is State Senator David Van Alstyne, of Bergen county, which lies in the extreme northwestern corner of New Jersey, just across the Hudson river from New York City, and is the source of much of the daily commutation traffic which the commission's report is designed to assist.

Bulwinkle Pact of Illinois Roads Effective March 24

The rate-procedures agreement entered by railroads which are members of the Illinois Freight Association will become effective March 24.

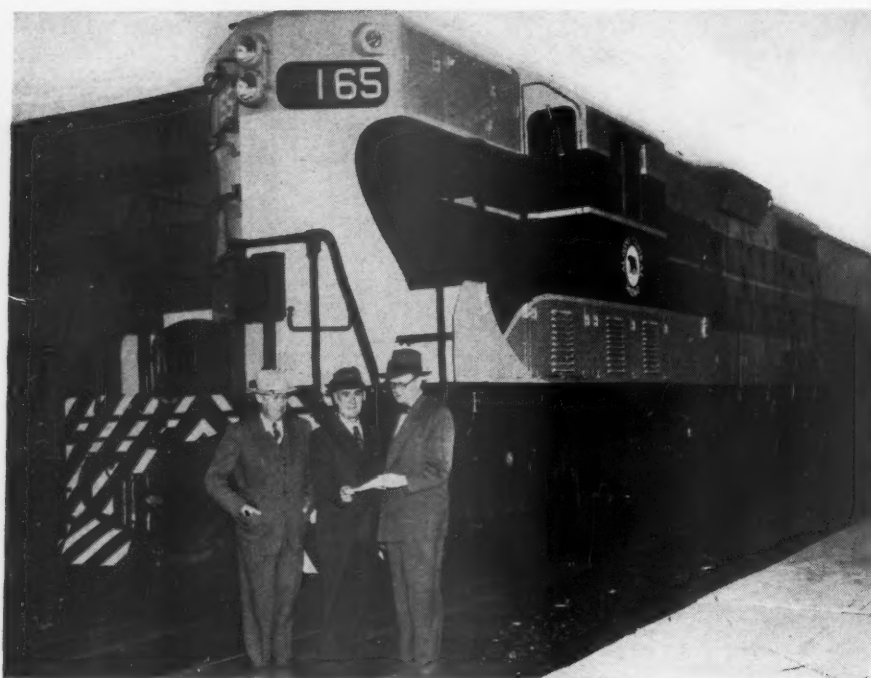
Division 2 of the Interstate Commerce Commission issued a February 6 order fixing that date and stipulating that the agreement had been approved with the modifications called for in the commission's report of August 17, 1951 (*Railway Age*, September 3, 1951, page 41). Interested railroads advised the commission sometime ago that the modifications were acceptable and had been made.

The proceeding was Section 5a Application No. 21, the agreement having been filed under the Interstate Commerce Act's section 5a, which was added by the Bulwinkle-Reed Act.

C. & O. Sets Up Industrial Research Bureau

The Chesapeake & Ohio has established an industrial development research bureau to collect and make available to industry information about every sizeable piece of industrial property served by the road. C. & O. personnel involved with the program are listed in the traffic department of this issue's *Railway Officers* columns.

Data to be made available through the bureau will include such subjects as soil, taxes, schools, minerals, labor conditions, housing, zoning, local economy,



THE 200TH LOCOMOTIVE built by General Motors Diesel, Ltd., London, Ont., since the plant was opened in August 1950, is shown here as it was delivered January 15 to the Algoma Central & Hudson Bay for main line service in northern Ontario. The 1,500-hp. general purpose unit was the 17th locomotive that G.M.D. has built for the Algoma Central. In the photograph, left to right, are G.M.D.'s acting gen-

eral manager, John W. Brophy; William R. Esson, master mechanic of the A.C. & H.B.; and G.M.D. sales engineer, D. A. Coape-Arnold. The 200th unit completed a total of 256,500 diesel locomotive horsepower turned out at the London plant, which now has a floor area of 280,247 sq. ft., including the new engineering and development center. Since its opening, G.M.D. has sold locomotives to 12 Canadian customers.

transportation methods and aerial photographs, as well as stereoscopic air survey maps in three-dimensional clarity, Arthur S. Genet, C. & O. traffic vice-president, said. The bureau will have offices at Huntington, W. Va., to serve the road's Chesapeake district, and at Detroit, for the Pere Marquette district.

A.A.R.'s Aydelott Has New Advisory Group on Research

A Coordinating Committee on Physical Research has been set up in the Operations and Maintenance Department of the Association of American Railroads, to report directly to A.A.R. Vice-President J. H. Aydelott, who is in charge of the department.

In authorizing the appointment of this new committee, the board of directors of the association gave further indication of the growing importance of research to the railroad industry. Appropriations for research purposes for the year 1952 total more than a million dollars, which is the largest annual expenditure authorized thus far in support of physical research under the direction of the association's research staff.

The number of research projects to be undertaken exceeds that handled in any previous year and, as heretofore, many will be "farmed out" to outside

research institutions. This year's expenditures will provide for purchase and installation of the most modern testing equipment in the association's own laboratory at Chicago and for employment of additional technicians who will conduct various research investigations in the laboratory and follow up such research projects as the association will farm out.

The new committee is composed of nine railroad officers who are leaders in their respective fields. Three were selected from the civil engineering department, three from the mechanical department, two from the test departments of the railroads, and the other from the operating department, the latter member being experienced in the field of shipping containers and packaging, the investigation and development of which is now a major activity in the new laboratory.

The new committee will screen the research programs recommended by committees of the Operating, Mechanical and Engineering divisions of the association and will arrange such priority among the projects as will insure the earliest possible conclusions to be reached concerning those projects in particular which offer the greatest potential benefits or economies to the railroad industry. The committee will prepare its annual budget requirements for consideration of the board of directors and member lines, and will in-

clude such recommendations as to the expansion of staff, facilities and equipment as the situation may call for.

Membership on the committee is territorially representative and the chairman will be selected from among members under a plan of rotation. The chairman selected for the year 1952 is Tom A. Blair, chief engineer, Atchison, Topeka & Santa Fe, who is the engineering department representative from western railroads. Other members of the committee are as follows: Representing eastern railroads—Frank K. Mitchell, manager of equipment, New York Central; Samuel R. Hursh, assistant chief engineer, Pennsylvania; Russell W. Seniff, engineer of tests, Baltimore & Ohio; representing south-eastern railroads—Harry C. Wyatt, assistant general superintendent, motive power, Norfolk & Western; Charles H. Mottier, vice-president and chief engineer, Illinois Central; J. Rowland Formby, assistant to vice-president (operations), Southern. In addition to Mr. Blair, western representatives are Max C. Haber, general mechanical engineer, Union Pacific, and Robert E. Coughlan, chief metallurgist and engineer of tests, Chicago & North Western.

Dr. J. T. Rettaliata to Head Illinois Tech

Dr. John T. Rettaliata, vice-president and dean of engineering of the Illinois Institute of Technology, and an important contributor to turbine locomotive design, has been appointed president, succeeding Dr. Henry T. Heald. Dr. Rettaliata also will serve as president of the institute's Armour Research Foundation and the Institute of Gas Technology.

Dr. Rettaliata, at 40, is probably the youngest president of a technical school in the country. He is best known as an authority on jet propulsion, and on steam and gas turbines, including their application to railroad motive power. He graduated from Baltimore Poly-

Car Surpluses and Shortages

Average daily freight car surpluses and shortages for the week ended February 9 were announced by the Association of American Railroads on February 14 as follows:

	Surplus	Shortage
Plain Box	490	2,219
Auto Box	353	9
Total Box	843	2,228
Gondola	270	1,089
Hopper	2,442	435
Covered Hopper ..	315	0
Stock	2,339	25
Flat	157	465
Refrigerator	1,939	110
Other	378	48
	8,683	4,400

EMERGENCY BOARD RECOMMENDS UNION SHOP AND CHECK-OFF FOR "NON-OPS"

A national agreement granting the union shop and check-off for 17 railroad unions was recommended in an Emergency Board report submitted to President Truman as this issue went to press.

"Viewed in fair perspective and in the light of the national policies determined by Congress, we find no sound or substantial basis for withholding the

union shop and check-off from these 17 organizations any longer," the board concluded.

The 17 unions represent non-operating employees. The board recommended that the pattern of settlement follow the outline set in earlier union-shop agreements on such roads as the New York Central and Baltimore & Ohio.

technic Institute in 1929 and received the degrees of B.E. at Johns Hopkins University in 1932, and of Dr. Eng. in 1936. During the next 10 years he worked for the Allis-Chalmers Manufacturing Company, becoming manager of its Research and Gas Turbine Development division. He was appointed director of the department of mechanical engineering at Illinois Tech in 1945, becoming dean of engineering in 1948.

Dr. Rettaliata has served as consultant on gas turbines for the Locomotive Development Committee of Bituminous Coal Research, Inc. He is currently vice-president of Region 6 of the American Society of Mechanical Engineers.

Rydin Sees Rails' Future As "Veiled But Good"

Optimism about the future of America's railroad industry was expressed, on February 5, by R. G. Rydin, vice-president of the Santa Fe, when he told the Chicago Transportation Club that:

"I believe this country will avoid another World War and the inequalities and conflicting governmental policies having to do with the nation's transportation industry will ultimately be corrected — maybe not 100 per cent, but substantially so. . . . In all likelihood the railroads will maintain the predominant hold on the freight business of this country and — while there will be plateaus and valleys in the future just as there have been in the past — the long term trend will continue upwards."

Mr. Rydin based his optimism on the steadily increasing population of the country, which he said points to an additional 20 million persons in the next decade, and on the as-yet unmatched ability of the railroads to handle mass movements of goods at minimum cost.

He was not so optimistic about the future of the railroad passenger business, because of the revolution in travel and living habits caused by "our principal competitor — the family automobile." Nevertheless, he found some cause for optimism in:

(1) The Pullman Company's recent comprehensive study of the sleeping

car business, which revealed that "inroads made by the airlines on this class of business subsequent to World War II have just about stopped — not everywhere, but generally."

(2) The recent granting of increased mail pay and the changes in postal regulations which have resulted in more business for the Railway Express Agency. He added however, that the net gain to railroads by this latter move was not yet clear.

(3) The ever increasing population, which will make passenger service remain a "necessary and important part of the entire transportation picture for so long a time ahead as anyone can see."

He said that passenger trains "will continue to warrant careful attention and constant improvement so as to remain in favor with the public, for 'As a man travelth, so shall he ship'."

No More Commodity Statistics by Areas

Railroads are no longer required to file reports of freight commodity statistics by geographical areas. The Interstate Commerce Commission has made effective its November 8, 1951, order ending such reporting.

The reports involved were the quarterly returns and annual summaries made on Form SCS, and Schedule 541A of Annual Report Form A. The commission received some protests against the discontinuance, but all such petitions were denied by Division 1.

7 Railroaders Took A.U.'s Traffic-Institute Course

Seven railroad employees were among 71 students who completed on January 25 the course of the Fourth Institute of Industrial Transportation and Traffic Management conducted by the American University, Washington, D. C. The institute closed with a dinner meeting at which certificates were awarded to the students by the university's acting president—Dr. James J. Robbins.

An address which E. F. Lacey, executive secretary of the National Industrial Traffic League, had been

scheduled to deliver was read by L. J. Dorr, assistant secretary of the league. Dr. L. M. Homberger, director of the institute, presided at the meeting.

The seven railroaders who received certificates were: Waverly M. Alexander, chief rate clerk, Bangor & Aroostook, Bangor, Me.; James M. Crites, general agent, St. Louis-San Francisco, Fort Worth, Tex.; W. D. Elliott, statistical clerk, Atchison, Topeka & Santa Fe, Amarillo, Tex.; Leo C. Hudson, head rate clerk, Santa Fe, San Francisco; A. J. Morrow, general agent, passenger department, Frisco, Chicago; Arthur A. Moser, chief rate clerk, Santa Fe, Kansas City, Kan.; and John R. Walter, chief clerk, general freight and passenger office, Santa Fe, Albuquerque, N. M.

Other members of the class included industrial traffic managers and others in industrial traffic work, and members of the armed forces on traffic assignments.

November Accidents

The Interstate Commerce Commission has made public its Bureau of Transport Economics and Statistics' preliminary summary of "steam railway" accidents for November 1951, and the first 11 months of last year. The compilation, subject to revision, follows:

Item	Month of November 1951	11 months ended with November 1951	November 1950	11 months ended with November 1950
Number of train accidents*	966	958	10,026	9,148
Number of accidents resulting in casualties	68	57	520	476
Number of casualties in train, train-service and nontrain accidents:				
Trespassers:				
Killed	66	67	1,035	1,094
Injured	70	67	939	1,060
Passengers on trains:				
(a) In train accidents*				
Killed	26	76	126	149
Injured	100	371	1,257	1,393
(b) In train-service accidents				
Killed	1	1	17	23
Injured	121	147	1,609	1,748
Travelers not on trains:				
Killed	1	7	5	5
Injured	57	63	645	670
Employees on duty:				
Killed	53	31	354	319
Injured	1,786	2,104	20,941	19,418
All other non-trespassers:**				
Killed	182	164	1,513	1,479
Injured	717	715	5,502	5,490
Total—All classes of persons				
Killed	329	339	3,052	3,069
Injured	2,851	3,467	30,893	29,779

*Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former caused damage of \$275 or more to railway property in 1950. Beginning January 1, 1951, this minimum was raised to \$300. Only a minor part of the total accidents resulted in casualties to persons, as noted above.

**Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties for all classes of persons, including both trespassers and nontrespassers, were as follows:

Persons:				
Killed	176	155	1,376	1,371
Injured	535	552	3,782	3,807

EQUIPMENT AND SUPPLIES

FREIGHT CARS

8,642 Freight Cars Delivered in January

New domestic freight car deliveries in January totaled 8,642, the American Railway Car Institute and the Association of American Railroads have announced jointly. Both organizations pointed out that January production, slightly over the 8,458 cars built in December, was more than 2,500 cars above the January 1951 level, when production totaled 5,949.

The institute and the A.A.R. also reported that 5,338 new freight cars were ordered in January, and that the backlog of cars on order on February 1 was 120,251. A breakdown of cars ordered and delivered in January, and of cars on order on February 1, appears in the accompanying table.

Type	Ordered Jan. 1952	Delivered Jan. 1952	On Order & Undelivered Feb. 1, 1952
Box—Plain	2,000	2,174	37,089
Box—Auto	250
Flat	850	90	3,804
Gondola	1,849	1,961	23,746
Hopper	300	2,332	36,728
Covered Hopper	225	311	4,763
Refrigerator	...	452	4,717
Stock	...	196	500
Tank	29	811	7,434
Caboose	65	21	524
Other	20	294	696
TOTAL	5,338	8,642	120,251
Carbuilders	5,101	6,081	79,258
Railroad Shops	237	2,561	40,993

The Chesapeake & Ohio has ordered 1,000 70-ton hopper cars from the American Car & Foundry Co. Authorization by the road's directors to purchase this equipment at an approximate cost of \$6,000,000 was reported in *Railway Age* last November 12, page 60.

SIGNALING

The Chicago, Rock Island & Pacific has ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company material to install centralized traffic control on approximately 60 miles of single track between Atlantic, Iowa, and Council Bluffs. The style C control machine will be installed at Council Bluffs yard office. In addition to code equipment, the order includes style H-2 searchlight signals, relays, rectifiers, transformers, coded track circuit apparatus, etc. Field installation will be handled by railroad forces.

MARINE

The Lehigh Valley has ordered a diesel-electric steel tug boat from the Jakobson Ship Yard, Oyster Bay, Long Island, N. Y. The new vessel—to be 106 ft. long with 26-ft. molded breadth

and 14-ft. draft—is scheduled to cost \$437,525 and delivery is expected before July 1953. It will be powered by an engine of 1,350 shaft horsepower and will be used for towing marine equipment between L.V. terminals in Jersey City and L.V. and other freight delivery points in New York harbor.

ORGANIZATIONS

"No Work—No Worry Club" to Meet in Florida

Transportation and industrial traffic men, whether retired or not, are invited to attend the annual reunion of the "old timers," doing business under the cheerful name of the "No Work—No Worry Club," at the Grey Gull Inn, Clearwater, Fla., on March 6. Those interested should advise George F. Hichborn at the inn of their intention to be present.

The Columbus (Ohio) Transportation Club will hold an education luncheon meeting on February 28. Former State Senator Ralph Winter, a member of the Public Utilities Commission of Ohio, will speak on "Trip Leasing." The meeting will be held at Riverview Recreation, Inc., 595 West Goodale street.

The New York Railroad Club has changed its next meeting date to February 26, at 33 West 39th Street, New York, at 8 p.m. Carroll Huntress, vice-president of the Republican Coal & Coke Co. and chairman of the St. Lawrence Project Conference, and James W. Danahay, vice-president and managing director of the West Side Association of Commerce, New York, will both speak on "The St. Lawrence Seaway."

The Women's Traffic Club of Metropolitan St. Louis will hold its next regular meeting on February 21, at the DeSoto Hotel. John C. Farris, manager, customers' business department, Union Electric Company, St. Louis, will be guest speaker.

Joseph Purselove, economist for the Pittsburgh Consolidation Coal Company, will be guest speaker at a dinner meeting on February 20 of the New York Financial Writers' Association. Mr. Purselove will discuss "The Transition in Coal and the Outlook for the Industry." The meeting will be held in Schrafft's executive dining room, 15 West 51st street, at 6:45 p.m.

The National Council for Educational Travel will hold a regional meeting in cooperation with the American Association of School Administrators, on February 25, at Kiel Auditorium, St. Louis.

SUPPLY TRADE

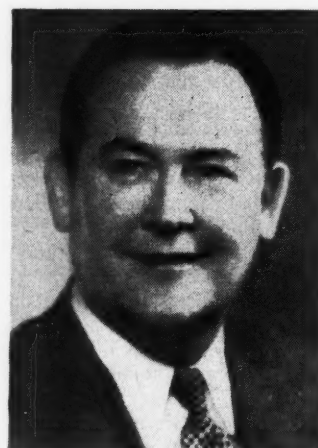
The Federal Telephone & Radio Corp., Clifton, N. J., an associate of the International Telephone & Telegraph Corp., has established a mobile radio communications department for design, manufacture, sale, and servicing of vehicular and railroad mobile radio equipment. Under the new setup, all mobile radio operations, including production of railroad radio-



J. J. McDevitt, Jr.

telephone equipment—an activity formerly handled by the Capehart-Farnsworth Corporation, I.T.&T.'s associate in Fort Wayne, Ind.—will be centered in Federal's newly acquired plant in Passaic, N. J. Production is scheduled to begin early in March with transfer of all essential machinery, inventories, and personnel.

J. J. McDevitt, Jr., formerly sales manager of the mobile radio department, will be manager of the new



Ellis Jones

department, and Ellis Jones, formerly in charge of Capehart's railroad mobile radio operations, will be sales manager. Others on the staff will include Merrill Wilson, service manager; Glen Sellers, chief engineer, and G. Glenn, supervisor of purchas-

ing-production-control, all of Capehart; and **Robert H. Kerr** and **Theodore Osins** of Federal, who will be test-quality-control inspector and superintendent, respectively.

Milton L. Edgren has been appointed field service engineer in the transportation division of the **Minneapolis-Honeywell Regulator Company**, at Minneapolis.

L. E. Durholt has been named manager of Hemingray Insulator sales of the **American Structural Products Company**, Toledo. He will be responsible for insulator business covering sales to communications and power customers. Mr. Durholt replaces **Minot Holmes**, who will retire shortly.



The Elwell-Parker Electric Company, of Cleveland, has appointed the Gogerty-Reynolds Supply Company, of Omaha, to handle sales of its trucks and cranes to railroads operating out of Omaha. **John Gogerty** (above), who recently retired as general superintendent of motive power and machinery for the Union Pacific at Omaha after nearly 50 years of railroad service, and **John M. Reynolds** (below), formerly a colonel of the United States Army, are partners in the firm.



OBITUARY

T. M. Ferguson, 67, New England sales and service representative for the Brandon Equipment Company, of Chicago, died on January 17.

FINANCIAL

Atlantic Coast Line.—Bonds.—Subject to I.C.C., approval, this company has sold, at par, \$22,000,000 of new 20-year general mortgage Series B 4½ per cent bonds, to be dated June 30, 1952. Proceeds will be used to refund an equal amount of first consolidated mortgage bonds, maturing July 1. The new Series B bonds were entirely subscribed for by institutional investors, principally life insurance companies, savings banks and trust departments of other banks located in Florida, South Carolina, North Carolina, Virginia, New Jersey, New York, Connecticut and Massachusetts. As reported in *Railway Age* January 28, page 54, the I.C.C. exempted sale of these bonds from its competitive bidding requirements, on the ground that the present public market for railroad bonds is "uncertain."

Baltimore & Ohio.—R.F.C. Loan.—Administrator **Stuart Symington** of the Reconstruction Finance Corporation last week made public a report by Special Counsel **Joseph J. Smith, Jr.** on the R.F.C.'s \$80,000,000 loan to this road. The report came out of an investigation, made at Mr. Symington's request, of charges that the B.&O.'s 1944 financial adjustment plan was "fraudulent and collusive." It contained the following conclusions and recommendations:

"There was no fraud, collusion or illegality involved in the proposal or consummation of the 1944 adjustment plan or in the R.F.C.'s assent to the plan and its consequent purchase of the B. & O.'s collateral trust bonds.

"The B. & O. and all of its security holders, including the R.F.C., benefited substantially from the B. & O.'s debt adjustment.

"The R.F.C. would probably have received more favorable treatment if it had so insisted. If the R.F.C. was in error in failing to demand more favorable treatment, however, its error was, at most, an error of judgment; it was not due to fraud or collusion.

In my opinion, there is nothing that the R.F.C. properly can or should do to upset the . . . adjustment plan or to rescind its purchase of the B. & O. collateral trust bonds, and there is no basis for any proceeding of any kind against any of the individuals concerned. I therefore recommend that the matter be closed."

Mr. Symington said that the R.F.C.'s general counsel had studied the report and concurred in its conclusions. "The R.F.C. therefore accepts the recommendations. . . and this phase of the matter has been closed," Mr. Symington added.

New York Central.—To Merge 7 Subsidiaries.—Directors of the New York Central and seven wholly owned subsidiaries have voted to merge their properties. The seven subsidiaries are the West Shore; New Jersey Junction; New York & Fort Lee; Walkill Valley; Toledo & Ohio Central; Lake

Erie Alliance; Wheeling; and Federal Valley. Approval of the roads' stockholders will be asked at May and June meetings.

The merger is designed to simplify the Central's corporate structure. Substantially all mileage of the companies to be merged, totaling about 1,248 miles, is under lease by the Central, and there would be no material change in physical operations. All outstanding bonds or other obligations of the companies to be merged would be assumed by the Central, which would acquire all property and franchises of the other roads.

New Securities

Application has been filed with the I.C.C. by:

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—To assume liability for \$2,400,000 of series PP equipment trust certificates to finance in part 22 diesel-electric locomotive units costing an estimated \$3,225,969:

Description and Builder	Estimated Unit Cost
12 1,500-hp road-switching units . . . (Electro-Motive Division, General Motors Corporation)	\$181,573

10 1,200-hp switching units (Fairbanks, Morse & Co.) 104,709

The certificates, to be dated March 1, would mature in 30 semiannual installments of \$80,000 each, beginning September 1, 1952. They would be sold by competitive bids, with the interest rate to be set by such bids.

DELAWARE, LACKAWANNA & WESTERN.—To assume liability for \$2,970,000 of series K equipment trust certificates, to finance in part 26 diesel-electric locomotive units costing an estimated \$3,728,000.

Description and Builder	Estimated Unit Cost
8 1,600-hp road-switching units (American Locomotive-General Electric Companies)	\$159,976

10 1,500-hp road-switching units (Electro-Motive Division, General Motors Corporation) 166,970

4 1,200-hp switching units (Electro-Motive) 103,406

4 800-hp switching units (Electro-Motive) 91,271

The certificates, to be dated March 1, would mature in 15 annual installments of \$198,000 each, beginning March 1, 1953. They would be sold by competitive bidding, with the interest rate to be set by such bids.

TENNESSEE CENTRAL.—To assume liability for \$634,000 of series G 4 per cent equipment trust notes, to finance acquisition of four 1,600-hp diesel-electric road-switching locomotives. The locomotives are being built by the American Locomotive-General Electric Companies, at a price of \$158,505 each. The notes, dated February 1, would mature in 30 semiannual installments of \$22,000 each, beginning August 1, 1952. The road said, in its application, that the Reconstruction Finance Corporation will aid in this financing. Upon approval of the I.C.C., the R.F.C. will purchase the notes at par. These four locomotives will be used to handle increased traffic resulting from construction of a large steam plant at Kingston, Tenn. The steam plant, built by the Tennessee Valley Authority, will use about 1,000,000 tons of coal a year, which will be handled by the T.C. under a 10-year contract with the T.V.A. (*Railway Age*, February 4, page 95).

Division 4 of the I.C.C. has **authorized:**

CHICAGO & WESTERN INDIANA.—To issue \$52,500,000 of series E first and refunding mortgage bonds, proceeds from which would be used to refund outstanding consolidated mortgage bonds, restore working funds, pay off short-term loans, and provide funds for additions and betterments in 1952 (*Railway Age*, February 4, page 98). The bonds being refunded are outstanding in the amount of \$50,000,000, and are scheduled for maturity July 1, 1952. The new bonds, dated March 1, would mature September 1, 1962. The C.&W.I. seeks authority to make an exchange offer before selling all the proposed new issue.

Meanwhile, the I.C.C. already has authorized the C.&W.I. to negotiate for sale of the new issue without complying with the usual competitive bidding requirements. The road sought this relief on grounds that the investment bond market is not receptive to new issues of railroad

mortgage bonds. Thus the interest rate on the new bonds will be subject to negotiation.

The Chicago, Indianapolis & Louisville, one of the five owners of the C.&W.I., has filed its application for authority to assume joint liability as to principal and interest payments on the new bonds.

Security Price Averages

	Feb. 11	Prev. Week	Last Year
Average price of 20 representative railway stocks	56.80	55.92	60.30
Average price of 20 representative railway bonds	92.08	91.44*	100.43

*corrected

Dividends Declared

CHICAGO & NORTH WESTERN.—preferred, \$2.55, payable March 1 to holders of record February 18.

CHICAGO, ROCK ISLAND & PACIFIC.—common, \$1; preferred, \$1.25, both payable March 31 to holders of record March 12.

DELAWARE & BOUND BROOK.—50¢, quarterly, payable February 20 to holders of record February 13.

ERIE & KALAMAZOO.—\$1.50, payable February 15 to holders of record January 31.

NORTH PENNSYLVANIA.—\$1, quarterly, payable February 25 to holders of record February 18.

PHILADELPHIA, GERMANTOWN & NORRISTOWN.—\$1.50, quarterly, payable March 5 to holders of record February 20.

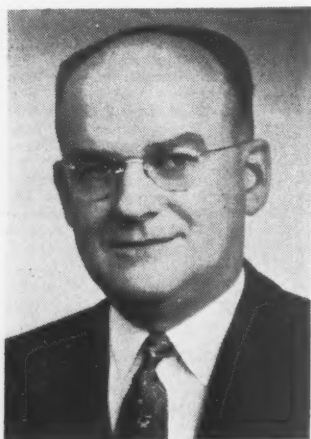
PITTSBURGH & WEST VIRGINIA.—50¢, quarterly, payable March 14 to holders of record February 20.

ST. LOUIS-SAN FRANCISCO.—common voting trust certificates (reduced), 50¢, payable March 15 to holders of record March 1; 5% preferred "A" voting trust certificates, \$1.25, quarterly, payable March 15, June 16, September 16, and December 15 to holders of record March 1, June 2, September 2 and December 1.

RAILWAY OFFICERS

EXECUTIVE

J. J. Nolan, passenger traffic manager of the PULLMAN COMPANY, has been elected vice-president — traffic. Mr. Nolan has been with Pullman for 32 years, starting as clerk in the pas-



J. J. Nolan

senger traffic department. He became district passenger agent in 1925, assistant general passenger agent in 1937, assistant passenger traffic manager in 1943, and passenger traffic manager in 1949.

B. W. Mitchell, superintendent of the Los Angeles division of the SOUTHERN PACIFIC, has been appointed vice-president and general manager of the subsidiary SAN DIEGO & ARIZONA EASTERN, succeeding **H. R. Gernreich**, retired.

Mr. Mitchell started his railroad career with the Pennsylvania in 1906 as brakeman, joining the S.P. in 1913 as brakeman and conductor. He held various operating department positions before being appointed division superintendent in 1942.

A biographical sketch of Mr. Gernreich appeared in *Railway Age* on November 19, 1951, page 84.

George C. Baggett, who for the past 16 years has been vice-president and general manager of the WASHINGTON & OLD DOMINION at Arlington, Va., will retire on March 1, after 34 years with this company and its immediate predecessor, and 17 years with other carriers.

Following an absence of several weeks, on account of his health, **Sherman O. Rentschler**, vice-president, operations, of the ELGIN, JOLIET & EASTERN, resigned on February 12.

FINANCIAL, LEGAL & ACCOUNTING

George C. Sprague, auditor for the CHICAGO, ROCK ISLAND & PACIFIC, has been appointed assistant general auditor, succeeding **Albert Weiberg**, who has retired. **A. P. Neill**, assistant auditor of disbursements, has been named auditor of disbursements. **W. H. Cramer** has been appointed to succeed Mr. Neill.

Mr. Sprague started with the Rock Island in the accounting department as a tabulating clerk in 1914. In his new post he becomes first assistant to the general auditor.

Mr. Weiberg has completed a 39-year-career on the railroad, starting as an office boy in the accounting department at the age of 15. He was appointed assistant general auditor in 1949.

MECHANICAL

J. W. Eckstein, superintendent motive power and cars of the AKRON, CANTON & YOUNGSTOWN at Akron, Ohio, has retired at his own request, after 32 years of service. **F. F. Lentz**, superintendent, has assumed supervision of the car department, in addition to his present duties. **H. L. Bullock** has been appointed superintendent of motive power and **E. H. Davidson, Jr.**, has been appointed diesel supervisor.

J. H. Kervin, general foreman for the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, at Chicago, has been appointed master mechanic of the Rocky Mountain division, at Deer Lodge, Mont.,

succeeding **W. E. Brautigam**, retired.

J. B. Roman, special engineer of the CHESAPEAKE & OHIO, has been appointed shop engineer at Richmond, Va., succeeding **R. P. Dollard**, retired.

Howard H. Melzer, assistant mechanical engineer of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC at Milwaukee, has been appointed mechanical engineer, succeeding **H. G. Miller**, whose retirement was announced by *Railway Age*, February 4, page 102. Mr. Melzer started with the Milwaukee in 1936 following graduation from Marquette University with a bachelor of civil engineering degree. Subsequently he has been production engineer, dynamometer engineer, assistant engineer of tests, and, since 1949, assistant mechanical engineer.

TRAFFIC

G. G. Kottenstette, division passenger agent for the WABASH at Chicago, has been appointed general passenger agent at the same point. He is succeeded by **E. J. Rohlfing**.

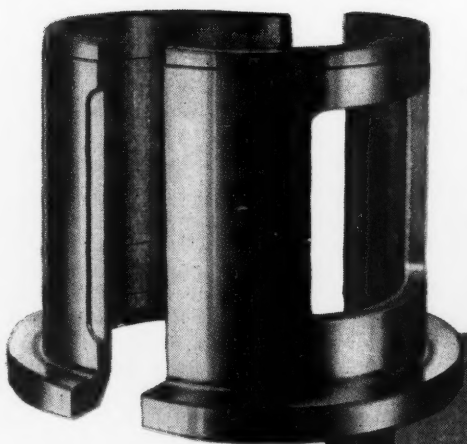
The CHICAGO & EASTERN ILLINOIS has relocated its Washington, D. C., agency offices in Suite 301, Shoreham building, 15th and H streets, N.W., postal zone 5. **W. H. Peake** is general agent.

George J. Bauer has been appointed traffic manager of the AKRON, CANTON & YOUNGSTOWN at Akron, Ohio. **Lester C. Ehrhardt** has been appointed coal freight agent at Akron.

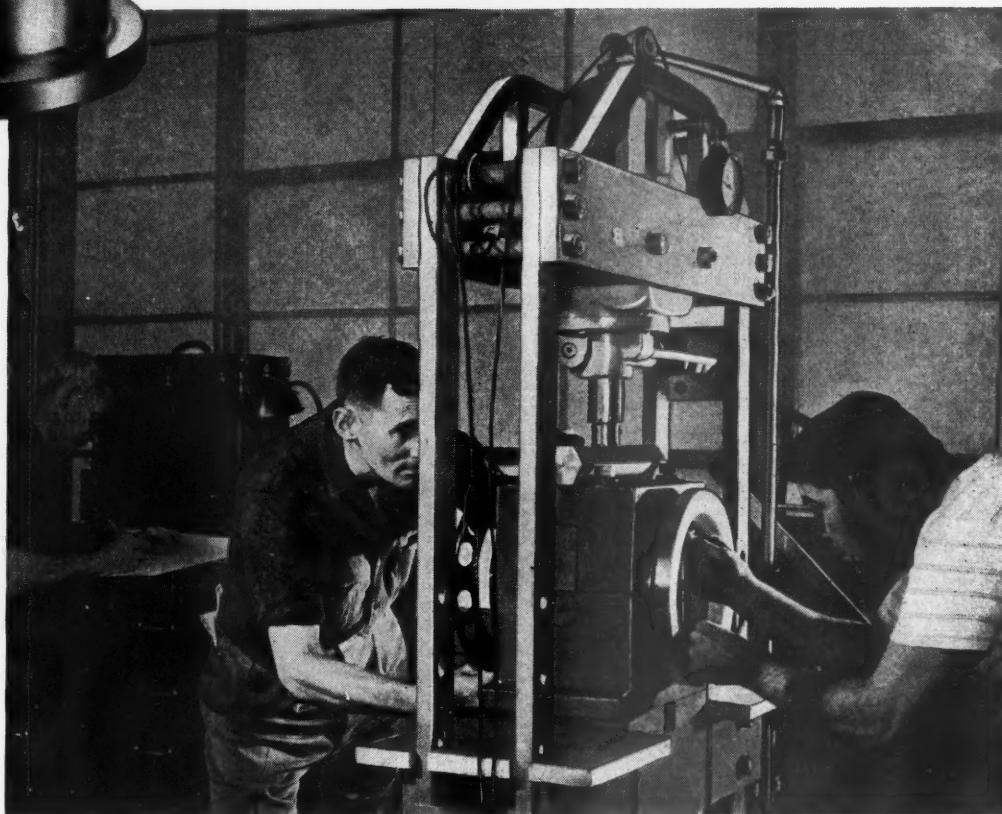
C. W. Newman has been appointed director of the newly formed industrial research department of the CHESAPEAKE & OHIO at Huntington, W. Va., and will have the following men under his jurisdiction: **W. R. Lamb** and **I. J. Warren**, industrial analysts at Detroit and Huntington, respectively, and **T. H. Loftus, Jr.**, and **S. B. Paine**, industrial engineers at Detroit and Huntington, respectively.

E. W. Drewe, general freight agent (rates) of the CANADIAN PACIFIC, has been appointed assistant freight traffic manager, having supervision of rates and divisions for the Eastern region, with headquarters as before at Montreal. **A. W. Izzard**, assistant general freight agent (rates), has been appointed general freight agent, rates and divisions, of the Eastern region, also with headquarters as before at Montreal. Mr. Drewe joined the C.P. in 1912 and was assistant general freight agent at Winnipeg before going to Montreal in December 1947 as chairman of the Canadian Association. He became general freight agent of the C.P. at Montreal in March 1948.

Mr. Izzard has been with the C.P. freight department at Montreal since



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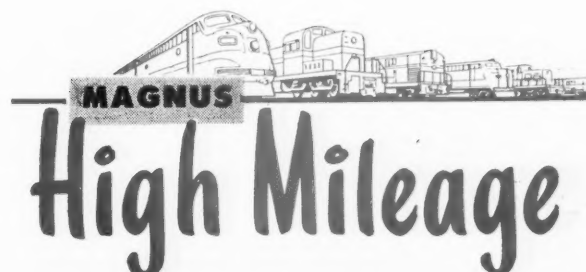
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- **SATCO LINING METAL** gives greater resistance to wear and load — stronger bonds — increased hardness at high temperatures.
- **IMPROVED FLANGE FILLET PROFILE** prevents “riding” the fillet and “feathering” of the lining metal.
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1916. He became chief of the division bureau at Montreal in March 1948 and was appointed assistant general freight agent in September 1949.

G. D. Johnson, assistant general freight agent for the GREAT NORTHERN, has been named general freight agent, with headquarters as before at Seattle. **W. E. Murray**, assistant foreign freight agent at Seattle, has been appointed foreign freight agent at Chicago, succeeding **R. W. Traynor**, who has been appointed general agent at Seattle.

Mr. Johnson has been with the G.N.



G. D. Johnson

for 33 years. He served as general agent at San Francisco before transferring to Seattle in 1948. He was appointed assistant general freight agent in 1950.

OPERATING

As reported in *Railway Age* January 21, **Marvin L. Smith** has been appointed assistant general superintendent of transportation of the MISSOURI



Marvin L. Smith

PACIFIC, at St. Louis. Mr. Smith joined the M.P. in 1921 as a secretary in the freight traffic department. He has served in various capacities at Alex-

andria, La., McGehee, Ark., and North Little Rock, and in the general office at St. Louis. He was superintendent of the Eastern division at the time of his recent appointment.

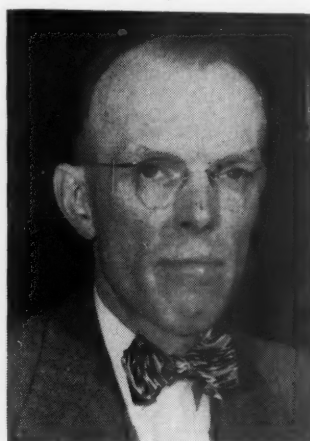
Gerald M. Holzmann has been appointed superintendent of the Little Rock and Louisiana divisions of the MISSOURI PACIFIC at Monroe, La., as reported in *Railway Age* January 21. Mr. Holzmann joined the M.P. in



Gerald M. Holzmann

1925 as a stenographer and later served in various clerical and secretarial positions until 1941, when he was appointed trainmaster. In 1949 he was promoted to assistant superintendent of the DeQuincy division.

As reported in *Railway Age* January 7, **Donald A. Logan** has been appointed superintendent of the Wyoming and Jefferson divisions of the ERIE at Dunmore, Pa. Mr. Logan was born at Warren, Pa., and attended Antioch



Donald A. Logan

College and the University of Pittsburgh (C.E.). He joined the Erie at Meadville, Pa., in 1930 as a transitman for an engineering corps and advanced successively to assistant section foreman; general foreman at Marion, Ohio, and Buffalo, N. Y.; supervisor at Kent, Ohio; assistant division engineer

at Youngstown and inspector of operation at Cleveland. Mr. Logan was appointed trainmaster at Hornell, N. Y., in 1940, transferring to Susquehanna, Pa., in 1941, Dunmore in 1942 and Jersey City in 1946. He was promoted to assistant superintendent at Jersey City in April 1951.

John E. Wightman, Jr., who has been appointed superintendent of the Lake division of the PENNSYLVANIA at Cleveland (*Railway Age*, December 31, 1951, page 60), is a native of Mt. Carmel, Pa. Mr. Wightman was graduated from Lehigh University and entered the service of the Pennsylvania in 1928 as a draftsman at Philadelphia. He has served as machinist, inspector foreman and master mechanic, and in 1948 was



John E. Wightman, Jr.

named superintendent motive power of the Western Pennsylvania division. Mr. Wightman was appointed superintendent motive power—diesel, Central region, at Pittsburgh, on November 1, 1950, which position he held until his recent appointment.

M. I. Dunn, superintendent freight transportation of the CHESAPEAKE & OHIO, has been appointed assistant general manager, with headquarters as before at Richmond, Va., succeeding **Richard Brooke**, who has retired after 26 years of service. **R. N. Begien, Jr.**, assistant general superintendent of the Western General division at Huntington, W. Va., has been appointed superintendent freight transportation at Richmond, succeeding Mr. Dunn. **P. G. Shepherd**, superintendent of the Huntington division, succeeds Mr. Begien. **J. W. Martin**, general foreman—coal piers, has been appointed to the newly created position of assistant superintendent—coal piers, with headquarters as before at Newport News, Va. The position of general foreman—coal piers has been abolished.

Mr. Dunn was born at Scottsville, Va., 52 years ago and joined the C. & O. as a rodman in 1916, resigning two years later to enter college. After graduation from Washington & Lee Univer-

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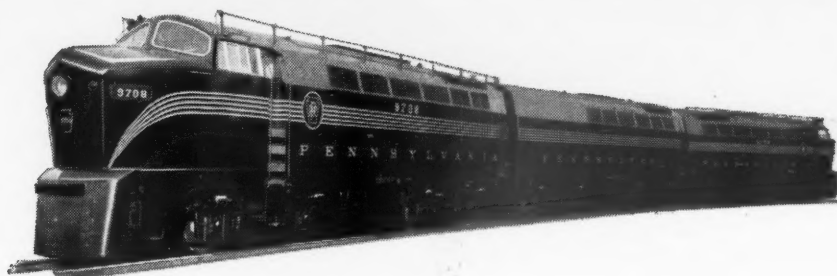
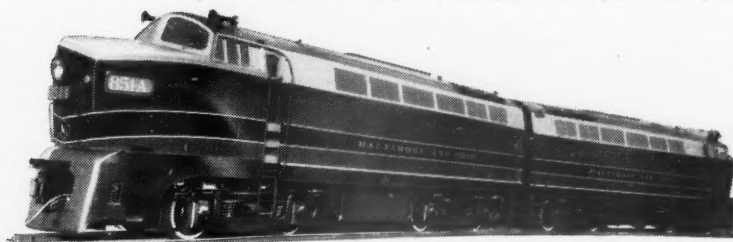
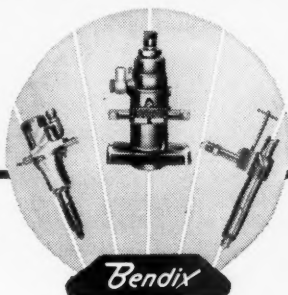
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sity (B.S. 1923), Mr. Dunn reentered the service of the C.&O. as an instrumentman in the construction department at Huntington. He has also been



M. I. Dunn

assistant engineer in the maintenance of way at Clifton Forge; assistant division engineer at Richmond; assistant division engineer and division engineer at Huntington; trainmaster at Handley, W. Va., and St. Albans; and trainmaster, division superintendent and general superintendent at Peru, Ind. Mr. Dunn became superintendent freight transportation in March 1951.

Mr. Brooke was born at Sutherlin, Va., on January 6, 1887, and attended Virginia Military Institute (C.E. 1908). He entered railroad service in April 1909 as a rodman with the Baltimore & Ohio, later serving as chairman, transitman, draftsman, assistant division engineer and assistant engineer. After service as captain and major with the American Expeditionary Forces during World War I, Mr. Brooke returned to the B.&O. in October 1919 as division engineer. From April to November 1925 Mr. Brooke was engaged in special study covering operation, expansion and development of the Anglo-Chilean Consolidated Nitrate railway in Chile. He joined the C.&O. in December 1925 and served as special engineer, assistant engineer maintenance of way, engineering assistant to president and assistant general manager, being appointed to the latter position in March 1933.

Mr. Begien was born at Washington, D. C., on May 10, 1903, and attended Princeton University. He entered railroad service in 1926 as assistant engineer on the C.&O. at Richmond and subsequently served as assistant trainmaster, special engineer, trainmaster, assistant superintendent, superintendent terminals, and division superintendent. Mr. Begien was appointed assistant general superintendent of the Western General division at Huntington in August 1949.

As reported by *Railway Age* January 21, **Samuel Hammer** has been ap-

pointed general manager of the Texas and Louisiana Lines of the MISSOURI PACIFIC at Houston, Tex., succeeding **A. B. Kelly**, retired. Mr. Hammer started his railroad career with the Illinois Central in 1904. He joined the Gulf Coast Lines in 1920 as conductor, and subsequently became general yardmaster and later trainmaster on several divisions. He was assistant su-



Samuel Hammer

perintendent until 1942, when he was promoted to superintendent. In 1948 he was advanced to general superintendent of the Southern district at Little Rock, Ark., and it is from that post that he has now been promoted.

Mr. Kelly joined the M.P. as messenger boy in the freight office at Omaha in 1901 and subsequently served as telegraph operator, dispatcher, chief dispatcher, trainmaster, terminal trainmaster and superintendent of



A. B. Kelly

the San Antonio division. In 1932 he was appointed assistant general manager of the Texas and Louisiana Lines and 10 years later was named general manager.

E. C. Sheffield, who has been appointed assistant general manager of the M.P.'s Texas and Louisiana Lines, at Palestine, Tex., entered the service of the International-Great Northern as a yard clerk in 1921. He joined the Fort Worth & Denver City in 1925,

but after holding several positions with that road returned to the I.-G.N., where he served successively as timekeeper, roadmaster's clerk, secretary to rules



E. C. Sheffield

examiner and rules examiner. In 1942 he became assistant trainmaster and later served as trainmaster and superintendent of terminals at Houston. In 1949 Mr. Sheffield was advanced to superintendent at Palestine, which position he held until his recent appointment.

Virgil V. Myers, general agent of the MERIDIAN & BIGBEE RIVER, has been appointed general manager and general freight agent at Meridian, Miss., succeeding **W. H. Thompson**, resigned.

L. C. Neff has been appointed superintendent of loss and damage prevention of the PENNSYLVANIA. Mr. Neff will report to the manager of stations and motor service and will devote his entire time to loss and damage prevention activities on the system—working in cooperation with the general managers, superintendents of stations and transfers, and division superintendents, all of whom will continue their present activities in this work.

As *Railway Age* reported January 21, **H. M. Peterson** has been appointed general superintendent in charge of operations for the NEVADA NORTHERN, and **W. R. Armstrong** has been named superintendent and chief engineer. Both are headquartered at East Ely, Nev.

Mr. Peterson joined the Western Pacific in 1927 as trainmaster's clerk at Salt Lake City, and after holding several secretarial positions, went with the N. N. in 1937 as chief clerk to superintendent. He was later appointed chief clerk to vice-president and general manager, and after serving as trainmaster, was named superintendent in 1951, the position from which he received his recent promotion.

Mr. Armstrong entered railway serv-

(Continued on page 66)

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(Continued from page 62)

ice in 1919 in the freight office of the Union Pacific at Salt Lake City. While attending the University of Utah and Dartmouth College from 1920 to 1925, he worked for the now abandoned Uintah, the U. P. and the Southern Pacific in minor engineering capacities, and from 1925 to 1938 served with the engineering departments of the S.P., the U.P. and the W.P. He joined the N. N. as supervisor of maintenance in 1938, and became chief engineer in 1940. He was appointed assistant superintendent and chief engineer in September 1951, and served in this capacity until his recent promotion. Dur-

ing World War II he served in the Army Transportation Corps.

As reported in *Railway Age* January 14, **V. E. Peterson** has been promoted to assistant general manager of personnel, Lines West of Buffalo, of the NEW YORK CENTRAL SYSTEM, with headquarters at Cleveland. Mr. Peterson was born on August 4, 1892, at Youngstown, Ohio, and joined the Central on October 1, 1907, as a clerk-stenographer there. He served in various capacities, including that of timekeeper, statistician and chief timekeeper at Youngstown until June 1930, when he went to Cleveland. There he

served successively as supervisor of payrolls and accounts, head accountant, assistant supervisor of wage schedules and supervisor of wage schedules. Mr.



V. E. Peterson

Peterson was named superintendent of personnel in March 1945, which position he held until his recent appointment.

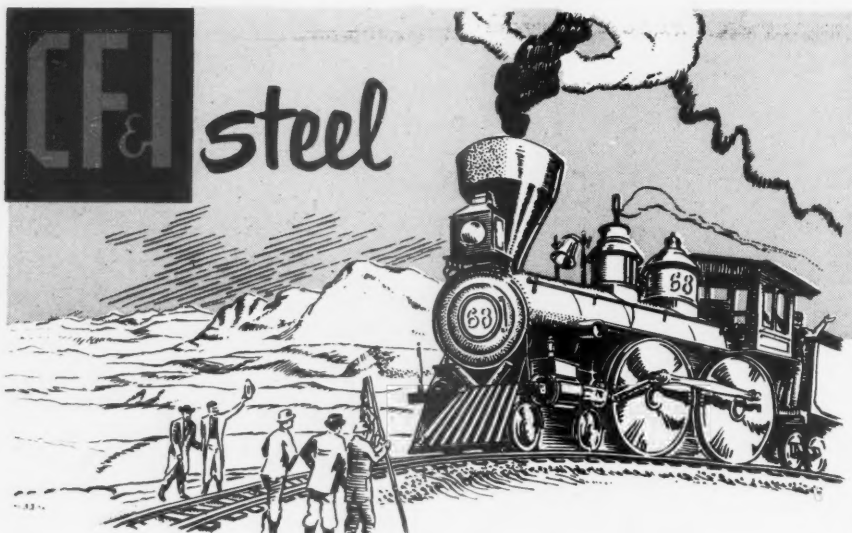
As reported in *Railway Age* January 14, **Robert W. Jones** has been promoted to superintendent of transportation of the DELAWARE, LACKAWANNA & WESTERN at New York. Mr. Jones entered the service of the Lackawanna as a clerk at Scranton, Pa., in 1928 and transferred to Hoboken, N. J.,



Robert W. Jones

in 1937, later becoming car agent and coal agent, successively. In November 1945 he was appointed night general yardmaster at Hoboken and a year later became general yardmaster. On January 1, 1950, he was promoted to trainmaster at Buffalo, N. Y., in which capacity he served until his recent appointment.

As reported in *Railway Age* January 28, **Ralph E. Sease** has been appointed superintendent of the Columbus division of the CENTRAL OF GEORGIA at Columbus, Ga. Mr. Sease was born at Prosperity, S. C., and was graduated from Clemson College (B.S.



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in C.E. 1925). He joined the C. of Ga. on November 1, 1928, as draftsman in the engineering department at Savannah and was promoted to assistant engineer in June 1935. Four years later he transferred to the track department and became track supervisor at Dothan, Ala., in April 1941, transferring to Columbus a year later. He was appointed supervisor of bridges and buildings of the Savannah division on September 1, 1944, and became terminal trainmaster at Atlanta on November 16, 1945.

SPECIAL

Donald Ashton, whose retirement as executive assistant in charge of public relations of the CHICAGO, BURLINGTON & QUINCY, was announced by *Railway Age* January 28, entered railroad service with the now abandoned Salt Lake & Utah as industrial agent in 1920, following World War I military service. Previously, he had attended Salt Lake Collegiate Institute and the University of Pennsylvania.



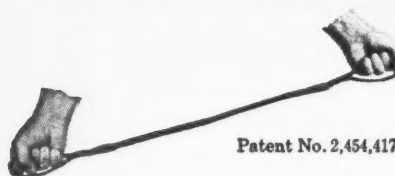
Donald Ashton

His subsequent career—from 1921 to 1936—was in the newspaper field, except for two years spent as western advertising manager for the Great Northern (1929 to 1931). He joined the Burlington in 1936 as assistant advertising agent and was appointed publicity director in 1942. He became executive assistant in charge of public relations in 1944.

OBITUARY

John L. Mumma, superintendent of the River division of the St. Louis-SAN FRANCISCO at Chaffee, Mo., died recently in St. Louis. Mr. Mumma started with the Frisco in 1909 as a helper on the former Kansas division, worked up through the operating department, and in 1943 was appointed assistant superintendent at Amory, Miss. He was appointed superintendent of the River division in 1949.

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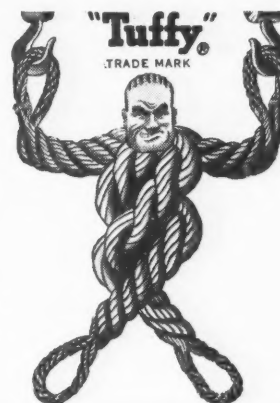
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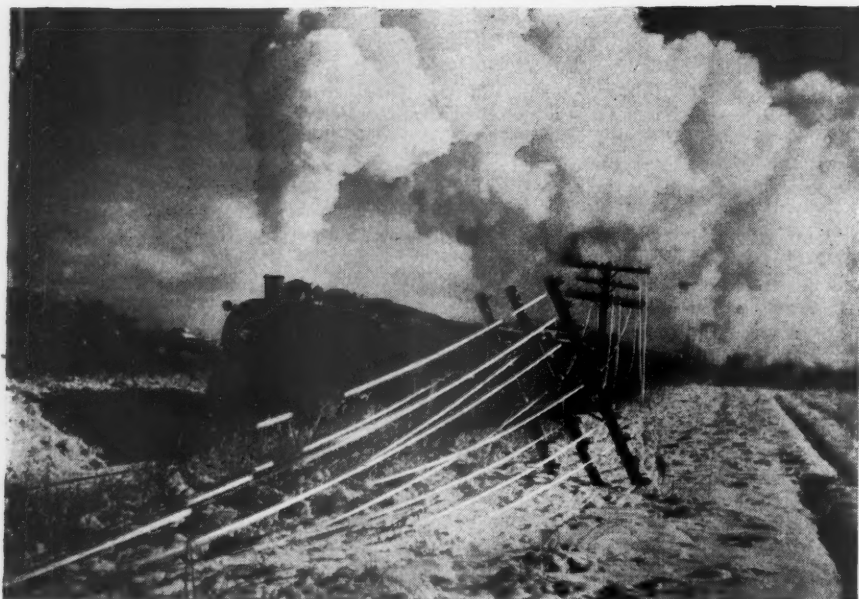
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Freight Operating Statistics of Large Railways—Selected

Region, Road and Year		Locomotive Miles				Car Miles		Ton-miles (thousands)		Road-locos. on lines				
		Miles of road operated	Train-miles	Principal and helper	Light	Loaded (thousands)	Per cent loaded	Gross excl. locos & tenders	Net rev. and non-rev.	Serviceable		B.O.	Per cent B.O.	
										Unstored	Stored			
New Eng. Region	Boston & Maine.....	1951	1,690	268,882	277,642	13,762	10,208	69.7	650,370	280,903	88	3	11	10.8
	1950	1,700	271,328	278,231	12,062	10,491	70.4	641,654	272,483	84	9	10	9.7	
Great Lakes Region	N. Y., N. H. & Htd.....	1951	1,765	297,879	297,897	18,606	11,412	70.5	705,797	309,690	95	..	7	6.9
	1950	1,766	295,276	295,980	28,213	11,733	69.7	730,364	319,984	99	..	9	8.3	
Central Eastern Region	Delaware & Hudson.....	1951	793	236,704	275,085	20,395	10,534	74.0	736,377	407,996	105	17	33	21.3
	1950	793	250,559	294,590	21,700	10,622	71.3	769,497	428,579	156	30	34	15.5	
Southern Region	Del., Lack. & Western.....	1951	964	278,819	299,718	29,464	12,457	70.8	827,471	393,109	77	8	9	9.6
	1950	966	290,278	317,070	32,422	12,606	69.0	828,878	376,279	84	1	42	33.1	
Northwestern Region	Erie.....	1951	2,243	618,239	628,506	31,462	34,027	68.0	2,164,447	907,535	172	11	18	9.0
	1950	2,228	662,224	678,965	44,288	34,634	68.7	2,176,359	910,021	199	9	25	10.7	
Central Western Region	Grand Trunk Western.....	1951	952	258,692	264,923	2,181	8,549	64.5	578,114	250,812	57	..	15	20.8
	1950	974	271,046	277,434	2,684	9,353	64.3	636,557	275,802	56	..	16	22.2	
Southwestern Region	Lehigh Valley.....	1951	1,210	239,763	248,178	15,691	12,417	72.7	808,473	394,591	36	5	6	12.8
	1950	1,227	243,805	256,346	22,291	12,326	73.9	799,618	392,388	50	4	21	28.0	
Great Lakes Region	New York Central.....	1951	10,675	2,951,840	3,121,436	153,902	107,573	62.2	7,758,260	3,553,530	958	112	320	23.0
	1950	10,691	3,166,270	3,316,364	186,865	110,390	62.3	8,084,767	3,574,512	1,030	23	360	25.5	
Central Eastern Region	New York, Chic. & St. L.....	1951	2,161	793,086	811,288	11,266	29,765	65.6	2,092,114	986,982	203	15	37	14.5
	1950	2,162	780,218	796,476	12,550	29,275	66.9	1,995,879	907,174	204	6	34	13.9	
Southern Region	Pitts. & Lake Erie.....	1951	221	84,428	86,923	..	3,552	65.1	285,610	162,498	33	3	14	28.0
	1950	221	78,215	80,730	345	3,402	70.4	280,003	173,668	28	..	17	37.8	
Northwestern Region	Wabash.....	1951	2,381	521,838	527,767	8,458	22,350	71.3	1,416,169	621,991	121	21	36	20.2
	1950	2,381	553,497	559,235	9,642	22,544	71.9	1,402,199	614,331	140	9	70	32.0	
Central Western Region	Baltimore & Ohio.....	1951	6,083	1,735,297	2,022,769	225,177	66,375	63.3	5,122,043	2,558,339	630	49	168	19.8
	1950	6,086	1,814,777	2,144,229	221,671	64,814	64.2	4,876,656	2,423,426	694	34	215	22.8	
Southwestern Region	Central of New Jersey.....	1951	412	71,338	71,486	3,443	2,803	66.9	210,248	111,616	43	..	5	10.4
	1950	410	72,534	72,534	4,416	2,657	67.1	195,265	101,713	40	..	5	11.1	
Central Eastern Region	Central of Pennsylvania.....	1951	208	70,290	79,149	14,579	2,590	69.9	194,379	107,384	35	..	6	14.6
	1950	210	69,369	75,447	11,479	2,625	72.7	187,252	103,434	39	..	16	29.1	
Southern Region	Chicago & Eastern Ill.....	1951	886	127,963	127,963	3,598	4,771	64.4	307,209	157,103	26	..	3	10.3
	1950	886	127,273	127,273	2,627	5,203	68.0	344,809	165,894	25	..	2	7.4	
Northwestern Region	Elgin, Joliet & Eastern.....	1951	238	96,932	97,915	126	3,415	63.9	275,309	149,816	45
	1950	238	94,832	97,443	616	3,767	67.1	294,427	162,765	41	
Central Western Region	Pennsylvania System.....	1951	10,041	3,131,483	3,389,403	358,113	131,280	66.4	9,394,021	4,661,911	1,147	85	349	22.1
	1950	10,042	3,057,010	3,353,744	345,128	130,485	68.5	8,943,165	4,424,106	1,224	..	344	21.9	
Southern Region	Reading.....	1951	1,311	391,108	403,509	27,150	14,495	66.6	1,144,347	636,301	188	32	33	13.0
	1950	1,315	375,921	388,157	25,183	14,446	67.1	1,121,068	622,191	178	16	30	13.4	
Northwestern Region	Western Maryland.....	1951	837	194,689	228,542	25,530	6,706	62.7	554,934	309,572	126	6	19	12.6
	1950	837	182,828	219,001	26,928	6,594	63.4	539,588	300,511	140	20	17	9.6	
Central Eastern Region	Chesapeake & Ohio.....	1951	5,043	1,483,936	1,559,064	69,095	66,075	56.2	5,882,937	3,286,305	496	5	215	30.0
	1950	5,042	1,451,031	1,519,365	60,702	60,241	57.4	5,100,475	2,781,777	521	3	183	25.9	
Southern Region	Norfolk & Western.....	1951	2,113	773,719	824,282	67,203	35,416	57.8	3,240,184	1,771,480	246	8	22	8.0
	1950	2,104	674,317	708,456	45,621	31,016	59.5	2,668,714	1,432,315	244	19	25	8.7	
Central Western Region	Atlantic Coast Line.....	1951	5,434	815,077	815,410	12,312	25,328	61.6	1,829,903	858,294	386	29	85	17.0
	1950	5,480	776,063	800,403	13,699	24,790	65.8	1,697,588	798,864	338	3	103	23.2	
Northwestern Region	Central of Georgia.....	1951	1,765	233,702	235,324	3,942	7,338	68.9	496,585	231,099	86	10	7	6.8
	1950	1,783	297,214	300,999	5,032	8,173	72.2	529,089	255,959	104	2	8	7.0	
Central Eastern Region	Gulf, Mobile & Ohio.....	1951	2,851	329,331	329,331	132	16,895	70.6	1,104,395	516,045	81	..	5	5.8
	1950	2,851	329,161	329,161	66	16,625	74.7	1,054,563	510,840	81	..	2	2.4	
Southern Region	Illinois Central.....	1951	6,539	1,646,594	1,652,891	58,147	56,559	61.2	4,179,656	1,916,415	587	7	68	10.3
	1950	6,540	1,583,840	1,589,028	55,964	55,893	63.6	4,051,174	1,894,045	578	1	77	11.7	
Central Western Region	Louisville & Nashville.....	1951	4,756	1,030,152	1,083,021	30,030	35,808	63.6	2,655,918	1,364,620	277	40	80	20.2
	1950	4,769	1,117,318	1,186,896	33,739	35,359	64.5	2,574,778	1,310,503	315	14	96	22.6	
Northwestern Region	Nash., Chatt. & St. Louis.....	1951	1,032	199,991	203,139	3,168	6,400	72.0	417,147	200,190	54	..	6	10.0
	1950	1,049	215,415	218,762	3,829	6,527	74.1	414,563	199,224	74	..	19	20.4	
Central Eastern Region	Seaboard Air Line.....	1951	4,136	672,066	680,578	1,821	24,235	65.3	1,691,707	782,029	201	67	12	4.3
	1950	4,136	732,157	764,982	3,971	24,542	67.2	1,700,461	800,097	232	11	46	15.9	
Southwestern Region	Southern.....	1951	6,263	1,151,838	1,153,017	12,542	41,031	70.0	2,657,689	1,245,121	355	56	118	22.3
	1950	6,320	1,274,385	1,283,490	14,038	42,686	71.0	2,681,932	1,231,049	389	14	160	28.4	
Central Western Region	Chicago & North Western.....	1951	7,889	847,778	857,571	22,394	31,381	65.2	2,196,648	1,019,883	277	12	158	35.3
	1950	7,921	949,036	965,392	27,751	33,584	65.6	2,366,525	1,057,896	304	3	124	28.8	
Northwestern Region	Chicago Great Western.....	1951	1,441	149,666	150,020	6,747	8,244	66.7	556,007	246,127	32	..	2	5.9
	1950	1,441	161,112	161,112	7,856	9,216	68.4	612,073	273,287	33	..	2	5.7	
Central Eastern Region	Chic., Milw., St. P. & Pac.....	1951	10,663	1,185,016	1,225,676	47,462	46,273	65.7	3,123,930	1,424,046	439	34	65	12.1
	1950	10,664	1,306,040	1,358,160	52,674	49,479	65.9	3,363,177	1,545,134	449	39	94	16.2	
Southwestern Region	Chic., St. P., Minn. & Omaha.....	1951	1,606	190,570	196,342	9,853	5,579	66.0	391,843	177,439	70	..	37	34.6
	1950	1,606	208,306	216,300	10,787	5,830	68.7	396,397	178,904	70	1	26	26.8	
Central Western Region	Duluth, Missabe & Iron Range.....	1951	567	147,292	147,650	940	5,778	50.6	523,685	285,140	64	..	4	5.9
	1950	560	136,297	137,091	1,289	5,915	50.2	554,115	311,052	63	..	2	3.1	
Northwestern Region	Great Northern.....	1951	8,309	1,166,137	1,167,578	48,246	43,723	64.9	3,170,586	1,495,806	339	122	61	11.7
	1950	8,220	1,249,477	1,249,018	53,285	48,782	64.2	3,559,356	1,672,832	384	60	56	11.2	
Central Eastern Region	Minneap., St. P. & S. Ste. M.....	1951	4,173	415,117	422,358	5,404	13,642	66.0	926,279	441,647	114	1	15	11.5
	1950	4,179	440,290	449,564	6,577	14,753	66.6	993,415	474,138	121	..	15	11.0	
Southwestern Region	Northern Pacific.....	1951	6,591	847,030	878,337	44,207	34,002	70.2	2,343,868	1,091,371	336	4	69	16.9
	1950													

Items for the Month of November 1951 Compared with November 1950

Region, Road and Year	Freight cars on line			Per Cent B.O.	G.t.m. per train-hr. excl. locos	G.t.m. per train-mi. excl. locos	Net ton-mi. per train-mile	Net ton-mi. per car-mile	Net ton-mi. per car-day	Car miles per car-day	Net daily ton-mi. per road-mi.	Train-miles per train-hour	Miles per loco. per day		
	Home	Foreign	Total												
New Eng. Region	Boston & Maine.....	1951	1,194	8,426	9,620	2.2	39,519	2,423	1,046	27.5	937	48.8	5,541	16.3	101.4
	1950	1,481	8,637	10,118	3.5	36,809	2,368	1,006	26.0	833	45.5	5,343	15.6	101.6	
	N. Y., N. H. & Hfd.....	1951	1,254	13,979	15,233	3.2	35,385	2,373	1,041	27.1	662	34.6	5,849	14.9	115.1
	1950	1,565	17,549	19,114	1.2	36,142	2,476	1,085	27.3	550	28.9	6,040	14.6	115.4	
Great Lakes Region	Delaware & Hudson.....	1951	3,054	6,143	9,197	5.3	59,271	3,123	1,730	38.7	1,441	50.2	17,150	19.1	67.2
	1950	2,264	6,210	8,474	5.3	58,295	3,084	1,718	40.3	1,592	55.3	18,015	19.0	51.7	
	Del., Lack. & Western.....	1951	4,004	11,213	15,217	5.9	47,225	3,022	1,436	31.6	864	38.7	13,593	15.9	123.9
	1950	4,943	11,101	16,044	9.3	45,119	2,903	1,318	29.8	759	36.9	12,984	15.8	99.3	
	Erie.....	1951	5,237	22,658	27,895	3.5	61,295	3,530	1,480	26.7	1,059	58.4	13,487	17.5	119.7
	1950	6,973	22,764	29,737	3.5	56,492	3,315	1,386	26.3	1,006	55.7	13,615	17.2	113.4	
	Grand Trunk Western.....	1951	3,281	8,752	12,033	4.1	46,197	2,246	975	29.3	665	35.1	8,782	20.7	138.1
	1950	3,815	10,775	14,590	5.2	45,875	2,371	1,027	29.5	615	32.4	9,439	19.5	142.4	
	Lehigh Valley.....	1951	1,842	13,527	15,369	6.6	64,048	3,410	1,664	32.0	851	36.8	10,870	19.0	189.5
	1950	4,916	11,421	16,337	6.2	63,442	3,342	1,640	31.8	787	33.4	10,660	19.3	126.5	
	New York Central.....	1951	51,854	110,652	162,506	5.8	43,560	2,671	1,224	33.0	738	35.9	11,096	16.6	87.1
	1950	50,147	130,668	180,815	4.8	40,001	2,591	1,145	32.4	665	33.0	11,145	15.7	93.1	
Central Eastern Region	New York, Chic. & St. L.....	1951	5,616	20,940	26,556	4.1	46,724	2,671	1,260	33.2	1,204	55.3	15,224	17.7	116.0
	1950	4,752	20,752	25,504	3.4	44,109	2,611	1,187	31.0	1,156	55.8	13,987	17.2	120.3	
	Pitts. & Lake Erie.....	1951	2,917	8,260	11,177	8.4	51,175	3,385	1,926	45.7	457	15.3	24,510	15.1	62.1
	1950	4,127	11,048	15,175	13.4	49,296	3,604	2,235	51.0	369	10.3	26,194	13.8	66.0	
	Wabash.....	1951	7,009	13,694	20,703	5.0	57,247	2,740	1,203	27.8	940	47.4	8,708	21.1	106.4
	1950	6,599	12,956	19,555	2.5	53,186	2,561	1,122	27.3	1,006	51.4	8,600	21.0	91.1	
	Baltimore & Ohio.....	1951	43,345	54,695	98,040	5.0	40,471	2,988	1,493	38.5	886	36.3	14,019	13.7	90.3
	1950	40,225	55,995	96,220	7.2	35,751	2,739	1,361	37.4	855	35.6	13,273	13.3	86.6	
	Central of New Jersey.....	1951	345	9,793	10,138	2.9	36,281	3,066	1,628	39.8	380	14.2	9,030	12.3	83.6
	1950	445	9,388	9,833	3.4	36,013	2,811	1,464	38.3	350	13.6	8,269	13.4	88.7	
	Central of Pennsylvania.....	1951	1,291	3,585	4,876	20.2	38,552	2,999	1,657	41.5	753	26.0	17,209	13.9	94.0
	1950	916	3,664	4,580	15.5	40,680	2,879	1,590	39.4	736	25.7	16,418	15.1	65.0	
Poca-hontas Region	Chicago & Eastern Ill.....	1951	1,576	3,574	5,150	5.0	39,482	2,409	1,232	32.9	1,029	48.7	5,911	16.4	164.6
	1950	1,992	3,906	5,898	6.2	45,067	2,716	1,307	31.9	925	42.7	6,241	16.6	165.1	
	Elgin, Joliet & Eastern.....	1951	5,858	14,607	20,465	2.3	18,548	2,936	1,598	43.9	242	8.6	20,983	6.5	107.0
	1950	5,554	14,830	20,384	1.6	19,148	3,225	1,783	43.2	276	9.5	22,796	6.2	125.0	
	Pennsylvania System.....	1951	95,280	125,052	220,332	7.9	47,288	3,091	1,534	35.5	708	30.0	15,476	15.8	85.8
	1950	89,159	125,671	214,830	12.6	43,051	3,029	1,498	33.9	687	29.6	14,685	14.7	85.6	
	Reading.....	1951	9,970	23,224	33,194	3.9	37,490	2,927	1,627	43.9	632	21.6	16,179	12.8	70.6
	1950	8,946	21,178	30,124	5.3	37,007	2,984	1,656	43.1	677	23.4	15,772	12.4	72.7	
	Western Maryland.....	1951	4,349	3,631	7,980	1.9	42,750	2,907	1,622	46.2	1,336	46.1	12,329	15.0	60.1
	1950	4,382	3,478	7,860	2.3	40,662	3,002	1,672	45.6	1,224	42.4	11,968	13.8	50.0	
	Chesapeake & Ohio.....	1951	50,291	23,107	73,398	5.4	65,912	4,005	2,237	49.7	1,465	52.4	21,722	16.6	81.4
	1950	43,971	24,259	68,230	5.6	57,396	3,553	1,938	46.2	1,299	49.0	18,391	16.3	80.6	
Southern Region	Norfolk & Western.....	1951	32,563	8,255	40,818	1.4	67,884	4,263	2,331	50.0	1,462	50.6	27,946	16.2	116.3
	1950	29,118	7,902	37,020	3.3	64,767	4,008	2,151	46.2	1,344	48.9	22,692	16.4	94.3	
	Atlantic Coast Line.....	1951	12,877	20,280	33,157	2.3	35,709	2,256	1,058	33.9	867	41.5	5,265	15.9	59.2
	1950	10,747	19,728	30,475	2.8	32,339	2,204	1,037	32.2	881	41.5	4,859	14.8	68.1	
	Central of Georgia.....	1951	2,275	6,130	8,405	5.1	37,343	2,140	996	31.5	898	41.4	4,364	17.6	82.8
	1950	1,630	6,229	7,859	3.8	30,502	1,795	869	31.3	1,034	45.7	4,785	17.1	97.1	
	Gulf, Mobile & Ohio.....	1951	3,178	12,007	15,185	3.1	62,678	3,362	1,571	30.5	1,116	51.7	6,033	18.7	140.8
	1950	2,928	11,865	14,793	2.3	62,341	3,210	1,555	30.7	1,110	48.4	5,973	19.5	141.5	
	Illinois Central.....	1951	23,153	34,832	57,985	1.9	41,810	2,567	1,177	33.9	1,114	53.7	9,769	16.5	93.1
	1950	18,609	34,542	53,151	1.9	44,307	2,585	1,209	33.9	1,195	55.5	9,654	17.3	89.4	
	Louisville & Nashville.....	1951	26,863	16,218	43,081	7.3	39,364	2,582	1,327	38.1	1,064	43.9	9,564	15.3	101.1
	1950	31,810	15,801	47,611	7.9	35,508	2,312	1,177	37.1	936	39.1	9,160	15.4	102.1	
Northwestern Region	Nash., Chatt. & St. Louis.....	1951	1,042	5,130	6,172	3.0	40,833	2,090	1,003	31.3	1,046	46.5	6,466	19.6	126.3
	1950	1,022	4,749	5,771	2.8	38,528	1,928	927	30.5	1,149	50.8	6,330	20.0	86.3	
	Seaboard Air Line.....	1951	9,677	16,773	26,450	1.7	45,207	2,551	1,179	32.3	1,018	48.3	6,303	18.0	90.0
	1950	8,285	15,566	23,851	1.8	40,739	2,377	1,119	32.6	1,114	50.8	6,448	17.5	104.3	
	Southern.....	1951	12,496	30,771	43,267	4.6	39,456	2,327	1,090	30.3	959	45.2	6,627	17.1	80.1
	1950	12,340	28,309	40,649	3.6	35,501	2,125	976	28.8	1,013	49.5	6,493	16.9	81.4	
	Chicago & North Western.....	1951	17,987	29,959	47,946	4.1	42,353	2,713	1,259	32.5	673	31.8	4,309	16.3	70.2
	1950	17,799	33,851	51,650	3.4	39,884	2,615	1,169	31.5	653	31.6	4,452	16.0	84.9	
	Chicago Great Western.....	1951	1,567	6,147	7,714	2.9	66,278	3,728	1,650	29.9	1,060	53.2	5,693	17.8	160.5
	1950	1,214	5,642	6,856	2.5	66,857	3,835	1,712	29.7	1,226	60.4	6,322	17.6	169.2	
	Chic., Milw., St. P. & Pac.....	1951	29,532	35,842	65,374	3.1	44,093	2,650	1,208	30.8	719	35.5	4,452	16.7	87.4
	1950	24,199	37,203	61,402	2.3	41,348	2,592	1,191	31.2	792	38.5	4,830	16.1	87.5	
Central Western Region	Chic., St. P., Minn. & Omaha.....	1951	1,102	8,065	9,167	3.8	28,869	2,132	965	31.8	626	29.8	3,683	14.0	72.7
	1950	1,156	8,411	9,567	2.6	26,508	1,997	901	30.6	604	28.7	3,713	13.9	83.6	
	Duluth, Missabe & Iron Range.....	1951	13,434	1,081	14,515	3.0	65,428	3,688	2,008	49.3	637	25.5	16,763	18.4	79.2
	1950	13,942	628	14,570	3.2	69,464	4,276	2,400	52.6	695	26.3	18,515	17.1	90.7	
	Great Northern.....	1951	21,253	25,178	46,431	2.8	46,082	2,742	1,294	34.2	1,085	48.9	6,001	16.9	82.7
	1950	22,564	23,164	45,728	3.1	45,184	2,895	1,361	34.3	1,194	54.3	6,784	15.9	93.4	
	Minneap., St. P. & S. Ste. M.....	1951	5,898	10,751	16,649	4.9	41,698	2,254	1,075	32.4	899	42.1	3,528	18.7	120.7
	1950	5,963	9,845	15,808	4.7	41,468									



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He Bosses the Freight-Car Fleet, by Walter Fitzmaurice. *Trains*, February 1952, pp. 20-26. Kalmbach Publishing Company, 1027 N. 7th st., Milwaukee 3, Wis. Single copies, 35 cents.

As chairman of the Car Service Division of the Association of American Railroads, Arthur Gass "bosses the freight-car fleet." Mr. Fitzmaurice reveals the interesting story behind the railroads' freight car expansion program adopted after the Korean conflict started, and many other facts about Mr. Gass and his "freight-car fleet."

Big Chief of the Southwest. Look, January 29, 1952, pp. 49-55. Cowles Magazines, Inc., 488 Madison ave., New York 22. Single copies, 15 cents.

A picture story of the Santa Fe's development of tourist attractions of the Southwest, compiled by Look's art and photographic staff. Interlaced with pictures of the Grand Canyon, Rancho de Taos, and Monument valley are scenes of life aboard the "Super Chief," freight car classification, diesel locomotives, etc.

Loneliest Housekeeper in America, by Herbert Dalmas. *Saturday Evening Post*, January 26, 1952, pp. 32-33, 57-59. Curtis Publishing Company, Independence sq., Philadelphia 5, Pa. Single copies, 15 cents.

How does a young Union Pacific signal maintainer's wife manage a family in a remote California desert "community" that is otherwise uninhabited; where the only contact with the world "outside" is the railroad line a few feet from the front door? Author Dalmas was curious, and with permission of the U.P., he stopped off at Crucero to visit with the Jack Pinneys, who "are" Crucero. In his illustrated story, he tells how the railroad virtually turns itself into a mail order house to supply the needs of the Pinneys and other U.P. families similarly situated.